REPORT RESUMES

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THE REGENTS TENTATIVE STATEWIDE PLAN FOR THE EXPANSION AND DEVELOPMENT OF HIGHER EDUCATION, 1964.

STATE UNIV. OF N.Y., ALBANY

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THE REGENTS PLAN OF 1964 IS THE FIRST OF A PROJECTED SERIES OF REPORTS OF HIGHER EDUCATION PLANNING IN NEW YORK STATE. THE COMPLEX OF HIGHER EDUCATION, INCLUDING THE OVER 200 PUBLICLY AND PRIVATELY CONTROLLED COLLEGES AND UNIVERSITIES WHICH ARE CONSIDERED IN STATEWIDE LONG-RANGE PLANNING, IS DESCRIBED, FOLLOWED BY A DISCUSSION OF THE NEEDS OF HIGHER EDUCATION AND THE GOALS THAT MUST GUIDE STATE PLANNING IF THESE NEEDS ARE TO BE MET. THE LONG-RANGE PLANS OF STATE UNIVERSITY AND CITY UNIVERSITY AND THE PLANS OF PRIVATELY CONTROLLED INSTITUTIONS ARE REVIEWED. A DISCUSSION OF FACTORS AFFECTING COSTS AND TRENDS IN EXPENDITURES AND INCOME CONCLUDES WITH AN ESTIMATE OF THE TOTAL COST EXPECTED BY 1970. THERE IS A SUMMARY AND PERSPECTIVE OF THE TOTAL PLAN. APPENDIXES ARE LISTS OF MEMBER INSTITUTIONS BY REGION AND COUNTY, REPORTS RELATING TO PLANNING FOR HIGHER EDUCATION IN NEW YORK STATE, SELECTED INFORMATION ON NEW YORK STATE COLLEGES AND UNIVERSITIES, BOARD OF REGENTS POLICY STATEMENT ON THE COMPREHENSIVE COMMUNITY COLLEGE, RESIDENCE AND MIGRATION OF COLLEGE STUDENTS IN NEW YORK STATE (FALL 1963), AND SPECIAL STUDIES PROJECTED AS A BASIS FOR FUTURE PLANNING. THERE ARE 26 TABLES AND 12 FIGURES. (AJ)

ED019577

THE REGENTS TENTATIVE STATEWIDE PLAN

for the

EXPANSION AND DEVELOPMENT OF HIGHER EDUCATION, 1964

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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The University of the State of New York
The State Education Department
Albany, New York
January, 1965

AC002120

THE UNIVERSITY OF THE STATE OF NEW YORK

Regents of the University (with years when terms expire)

1968 Edgar W. Couper, A.B., LL.D., L.H.D., Chancellor, Binghamton
1967 Thad L. Collum, C.E., Vice-Chancellor, Syracuse
1978 Alexander J. Allan, Jr., LL.D., Litt.D., Troy
1966 George L. Hubbell, Jr., A.B., LL.B., LL.D., Litt.D., Garden City
1973 Charles W. Millard, Jr., A.B., Buffalo
1970 Everett J. Penny, B.C.S., D.C.S., White Plains
1972 Carl H. Pforzheimer, Jr., A.B., M.B.A., D.C.S., Purchase
1975 Edward M. M. Warburg, B.S., L.H.D., New York
1971 J. Carlton Corwith, B.S., Water Mill
1969 Joseph W. McGovern, A.B., LL.B., L.H.D., LL.D., New York
1965 Allen D. Marshall, A.B., LL.D., Scotia
1977 Joseph T. King, A.B., LL.B., Queens
1974 Joseph C. Indelicato, M.D., Brooklyn
1976 Helen B. Power, A.B., Litt.D., Rochester

President of the University and Commissioner of Education
James E. Allen, Jr.

Deputy Commissioner of Education
Ewald B. Nyquist

Associate Commissioner for Higher and Professional Education
Frank R. Kille

Assistant Commissioner for Higher Education Planning
S. V. Martorana

K1030-F65-3,000

THE REGENTS TENTATIVE STATEWIDE PLAN FOR THE EXPANSION AND DEVELOPMENT OF HIGHER EDUCATION, 1964

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INTRODUCTION

Planning for higher education by the State of New York has had a long history. The first of a series of reports and legislative acts concerned with colleges and universities goes back to 1784, five years before the founding of the Republic. In that year the Legislature created a corporation entitled "The Regents of the University of the State of New York" which was empowered to found schools and colleges. In 1961 the Legislature amended the Education Law of the State by directing the Regents to prepare a plan for the expansion and development of higher education. 1/

This legislative act is unique among state statutes on planning for higher education in that it calls for continuous planning involving all institutions of higher education in the State whether under private or public control. The law requires that the Regents Plan be brought up to date every four years, and provision is made for annual reports and amendments in the intervening years. In all these Regents plans, recognition is to be given to "that historical development of higher education in the State which has been accomplished through the establishment and encouragement of private institutions."

This Regents Plan of 1964 is, therefore, but the first of a projected series of reports which will provide a continuity of State effort in planning. As such it is appropriate that it contain not only recommendations to meet present needs and those most clearly defined for the years immediately ahead but also that it consider broad policies and proposals which will be of increasing importance in long-range planning.

Part I describes briefly the complex of higher education, including over 200 publicly and privately controlled colleges and universities, all of which are to be considered in statewide long-range planning. The number and variety of colleges and universities, both private and public, are unequaled by any other state in the nation and present extraordinarily rich resources for post-secondary education. But this number and variety of institutions obviously make planning difficult, complicated, and critically important.

To provide a proper orientation for planning, Part II briefly describes the needs for higher education, both from the point of view of the individual and of the State.

Part III presents the goals that must guide State planning if these needs are to be met.

Part IV reviews the long-range plans of State University and City University and specifies reservations held by the Regents. Brief reference is also made here to the plans of privately controlled institutions as the background for the more complete consideration that appears in Part V.

1/ The pertinent sections of the 1961 amendment to the Education Law appear in Appendix A, and a selected list of the more important documents concerning planning will be found in Appendix B to this report.

The responsibility of the Regents, however, extends beyond the review and approval of proposals advanced by the colleges and universities of the State. The legislation of 1961 requires the Regents not only to review the long-range plans of State University and of City University, but upon approval, to incorporate them in a Regents Plan for the expansion and development of higher education in the State. A simple compilation of their proposals, along with the addition of available information on the plans of private institutions, would not produce a comprehensive, long-range, statewide Regents Plan envisioned by the legislation of 1961. This was further emphasized by the provision in the statute that the Regents "may include plans with respect to other matters not comprehended within the Plan of the State and City University." Therefore, in Part V proposals originating with the Regents are advanced to supplement those received from the institutions and to deal with certain broad problems and areas of special concern which become apparent in planning to meet the needs of the State as a whole.

Part VI discusses factors affecting costs, and trends in expenditures and income. It concludes with an estimate of the total cost expected by 1970.

Finally, a summary and perspective of the total Plan is presented in Part VII.

PART I

INSTITUTIONS, ORGANIZATIONS, RELATIONSHIPS

The Committee on Higher Education, appointed jointly by the Governor and the Regents, in its 1960 study described the State's machinery for the control and operation of higher education as "one of the most complex in the whole country." [2] Yet underlying this complex and often confusing legal administrative structure are certain fundamentally sound principles and patterns of organization. Although these are not always clearly perceived, they are nevertheless a source of great strength in New York State as it moves to meet today's vast needs and tremendous problems in higher education.

1. THE REGENTS OF THE UNIVERSITY OF THE STATE OF NEW YORK

The history of the legal structure for governing higher education in New York State goes back to 1784. In that year "The Regents of the University of the State of New York" was incorporated and empowered to found schools and colleges. The Regents have constitutional as well as statutory authority over educational matters in the State.

Today the higher education component of The University of the State of New York (not to be confused with State University of New York described in the next section) consists of 231 main campuses and institutional branches of colleges and universities (Figure 1) which have been incorporated by the State Board of Regents or are subject to visitation by the Regents. (See Appendix C for a list of these institutions and Appendix D for their regional distribution.) Under the law this unique University includes, in addition to institutions of higher education, all secondary schools and such other institutions as schools, museums, libraries, organizations, and agencies for education "now or hereafter incorporated by the State." Thus, The University of the State of New York comprises the entire educational system in New York State, from nursery school to graduate school, public and private.

The governing head of The University of the State of New York is the State Board of Regents, a body of fourteen laymen, elected by the Legislature, each for a fourteen-year term. The Regents' appointed executive officer, and the professional head of the University, is the State Commissioner of Education who also holds the title of President of The University of the State of New York. The State Education Department is the executive agency for the Regents and the Commissioner.

The Regents are vested with the responsibility of determining the "educational policies" of the State, consistent with the Constitution and statutes, and are authorized to establish rules carrying into effect the laws and policies of the State relating to education. They are directed by law "to encourage and promote education, to visit and inspect its several institutions and departments, to distribute to or expand or administer for them such property and funds as the State may appropriate therefor or as the University may own or hold in trust or otherwise, and to perform such other duties as may be entrusted to it."

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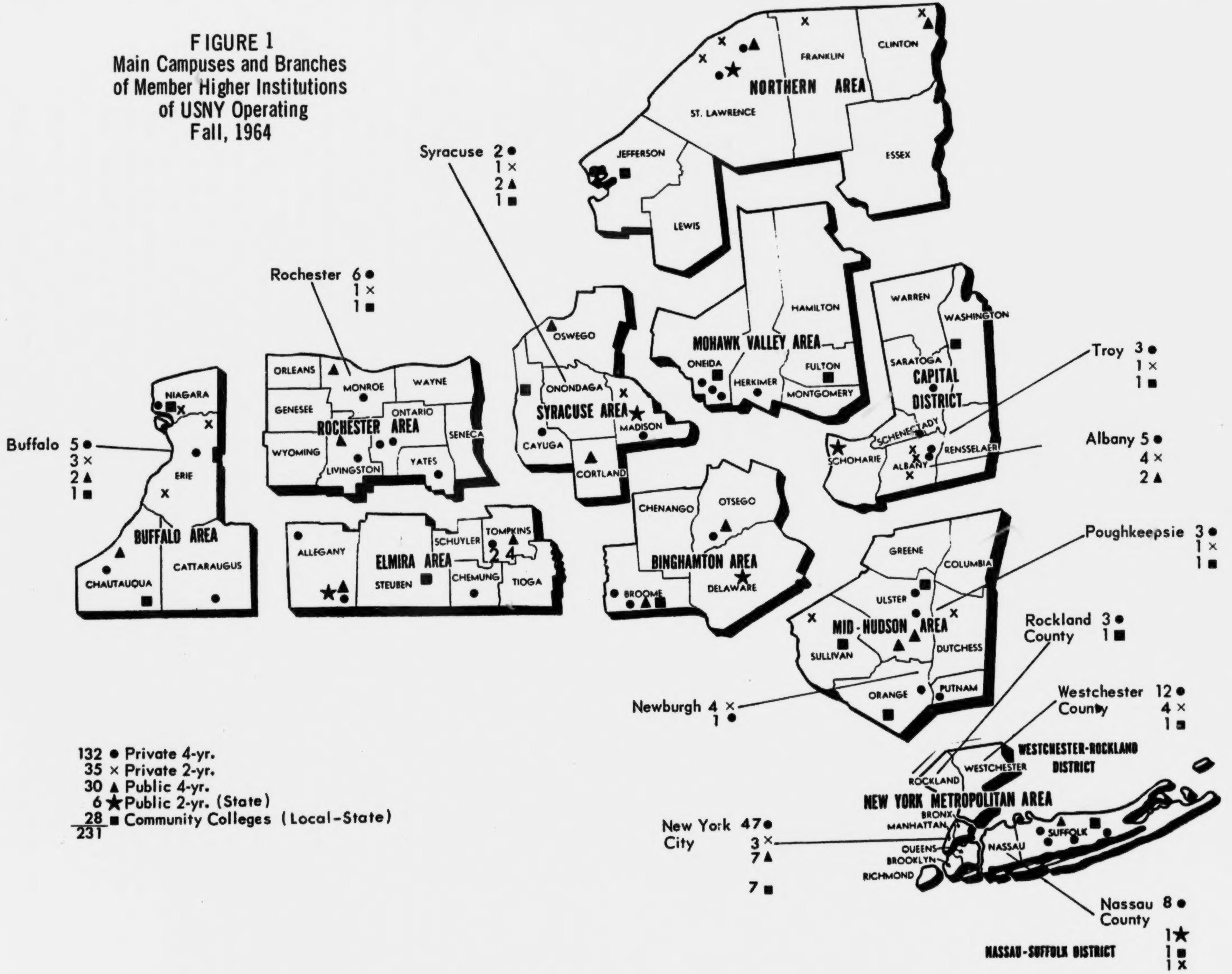
[2] Meeting the Increasing Demand for Higher Education in New York State, A Report to the Governor and the Board of Regents. Committee on Higher Education (Marion B. Folsom, John W. Gardner, Henry T. Heald, Chairman) and Director of Studies Sidney G. Tickton. November 1960.

FIGURE 1
Main Campuses and Branches
of Member Higher Institutions
of USNY Operating
Fall, 1964


NORTHERN AREA
ST. LAWRENCE
FRANKLIN
CLINTON
ESSEX
JEFFERSON
LEWIS
MOHAWK VALLEY AREA
HAMILTON
ONEIDA
HERKIMER
FULTON
MONTGOMERY
CAPITAL DISTRICT
WARREN
WASHINGTON
SARATOGA
SCHENECTADY
SCHOHARIE
ALBANY
RENSSELAER
SYRACUSE AREA
OSWEGO
ONONDAGA
MADISON
CAYUGA
CORTLAND
ROCHESTER AREA
ORLEANS
MONROE
WAYNE
GENESEE
ONTARIO
SENECA
WYOMING
LIVINGSTON
YATES
BUFFALO AREA
NIAGARA
ERIE
CHAUTAUQUA
CATTARAUGUS
ELMIRA AREA
ALLEGANY
STEUBEN
SCHUYLER
TOMPKINS
CHEMUNG
TIOGA
2
4
BINGHAMTON AREA
CHENANGO
OTSEGO
BROOME
DELAWARE
MID-HUDSON AREA
GREENE
COLUMBIA
ULSTER
SULLIVAN
DUTCHESS
ORANGE
PUTNAM
WESTCHESTER-ROCKLAND DISTRICT
ROCKLAND
WESTCHESTER
NEW YORK METROPOLITAN AREA
BRONX
MANHATTAN
QUEENS
BROOKLYN
RICHMOND
NASSAU
SUFFOLK
NASSAU-SUFFOLK DISTRICT
Syracuse 2 ● 1 × 2 ▲ 1 ■
Rochester 6 ● 1 × 1 ■
Buffalo 5 ● 3 × 2 ▲ 1 ■
Troy 3 ● 1 × 1 ■
Albany 5 ● 4 × 2 ▲
Poughkeepsie 3 ● 1 × 1 ■
Rockland County 3 ● 1 ■
Newburgh 4 × 1 ●
Westchester County 12 ● 4 × 1 ■
New York City 47 ● 3 × 7 ▲ 7 ■
Nassau County 8 ● 1 ★ 1 ■ 1 ×
132 ● Private 4-yr.
35 × Private 2-yr.
30 ▲ Public 4-yr.
6 ★ Public 2-yr. (State)
28 ■ Community Colleges (Local-State)
231

The Regents and the Commissioner of Education are authorized to inspect and require reports from any institutions in the University. The Regents may suspend or revoke the charter of any of the rights and privileges of any institution which fails to make any required reports or violates any law or any rule of the Regents.

In addition to their broad coordinating and supervisory roles for all of education in the State, the Regents have certain specific responsibilities for higher education. The most recent is the promulgation and revision of this Regents Plan for the expansion and development of higher education in the State. Others are: chartering institutions; approving curriculums leading to all degrees at all levels; certifying teachers; examining, licensing and enforcing laws regarding conduct of twenty professions; administering the undergraduate scholarship, graduate fellowship, and Scholar Incentive programs; and encouraging improvement and innovation in instruction and college administration. As the State Commission for the Higher Education Facilities Act of 1963 and for the Vocational Education Act of 1963, the Board of Regents also carries responsibilities for the administration of certain statewide Federal programs bringing Federal aid to higher education, both private and public.

The State Advisory Council on Higher Education

In addition to the work of the various offices of the State Education Department serving to integrate this huge federation of privately and publicly controlled colleges and universities, the Regents and the Commissioner are assisted by the State Advisory Council on Higher Education, composed of 18 chief executive officers from all types of publicly and privately controlled colleges and universities of the State. Established by the Regents in 1958 with the Commissioner of Education as its chairman, it has played an important role in formulation of educational policies. Matters concerned with proposed legislation, educational planning and administration, and statewide coordination and cooperation are brought before the Council for study and recommendation.

The four major segments [3] of higher education in The University of the State of New York over which the Regents preside are: State University of New York; City University of New York; the community colleges; and the privately controlled colleges.

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[3] See Appendix E for details:

Table 1.	Higher Educational Institutions in New York State by Type of Control and Length of Programs, 1963-64.
Table 2.	Number and Highest Level of Offering of Higher Educational Institutions in Six States and in the United States, 1963-64.
Table 3.	Full-Time Degree-Credit Enrollment by Degree Level and Type of Institution - Preliminary Survey - Fall 1964.
Table 4.	Part-Time Degree-Credit Enrollment by Degree Level and Type of Institution - Preliminary Survey - Fall 1964.
Table 5.	Full- and Part-Time Degree-Credit Enrollment by Degree Level and Type of Institution - Preliminary Survey - Fall 1964.
Table 6.	Comparison of Degree-Credit Enrollments Fall 1963 and Fall 1964.

2. STATE UNIVERSITY OF NEW YORK

State University of New York is controlled by a Board of Trustees, appointed by the Governor and confirmed by the Senate. The fifteen members serve ten-year terms. State University encompasses four university centers, ten multiple-purpose four-year colleges, two medical centers, six two-year agricultural and technical colleges, and eight other professional colleges. The headquarters for central administration and coordination of State University is located in Albany.

With the exception of the submission of a long-range plan and its periodic revision, the Board of Trustees of State University is related to the Regents in much the same way as are the boards of control of all the private institutions of higher education.

3. CITY UNIVERSITY OF NEW YORK

The legislative act of 1961 created City University of New York, bringing together into a single university structure the several four-year colleges of the City of New York under the Board of Higher Education of the City of New York. The Board also serves as the trustees for six community colleges in New York City. This Board numbers 21 members who are appointed by the Mayor for terms of nine years, with the President of the Board of Education of the City of New York serving ex officio. Under the Education Law of the State the Board of Higher Education is a part of the public school system of New York City.

4. PUBLIC COMMUNITY COLLEGES

State University of New York has general responsibility, under the State Education Law, for the state-level supervision of the public community colleges. As of the fall of 1964, there were 28 such institutions in operation. Though generally supervised by State University, the community colleges in some respects are autonomous and independent of State University. Local governmental agencies sponsor these institutions and provide local tax funds to help support them. In most instances the sponsors are County Boards of Supervisors. Examples of exceptions to the general rule are the six community colleges sponsored by the Board of Higher Education of the City of New York. Within the program of State University, the educational operations and policies of the community colleges are, however, set by their own institutional boards of trustees. Each board of trustees has nine members, four appointed by the Governor and five by the local sponsoring agency.

5. PRIVATELY CONTROLLED HIGHER EDUCATION

Historically, New York State has relied heavily upon privately controlled colleges and universities. There are several reasons why this has been so. One is the fact that privately controlled colleges were established much earlier than any public institution. Some private colleges date back to the colonial period. Another is that New York's participation in the Federal Land-Grant Act of 1862 differed from the pattern typical of other states. As a result, "contract colleges" at Cornell University were established in agriculture, home economics, and industrial and labor relations. The wide diversity of backgrounds in nationality, religion, and family culture in New York State also encouraged the development of various types of privately controlled educational institutions.

Until a few years ago, the combined resources of the privately controlled colleges, the contract colleges at the three universities already named, the system of State-controlled and supported teachers colleges, and the city colleges of New York, were considered adequate to meet all of the State's needs. Not until 1948 was it decided that a full-scale State University was necessary to help meet the rapidly growing needs at the post-secondary-school level.

That the State must continue to rely heavily on the private colleges is a fact of life constantly before the people of New York. The Heald Committee Report, after advocating several important and far-reaching moves to strengthen publicly controlled higher education, asserted:

> "But the bulwark of higher education in New York State for many years has been our private colleges and universities, and the great tradition of meeting the need of higher education through a combination of private and public institutions must be preserved for the future." 4/

The privately controlled colleges and universities in the State are remarkably diverse. Among the 167 private institutions and institutional branches in the State are some renowned, complex universities that equal in quality and reputation the best in the nation and the world. There are special-purpose schools, that, in their fields, enjoy comparable reputations. There are small junior colleges for women and others for men; minor and major seminaries; resident colleges that have students coming from all over the world; institutions that, though privately controlled, provide an essentially public service to the residents of a particular area.

When the private colleges are studied in their historic and present position in the State from a statewide perspective, it is clear that in their collective aspects they provide a strong resource to the State. Therefore, in this report the private colleges are handled as a group, except to distinguish between two-year and four-year types. A breakdown to this extent was necessary to provide, first, a basis for comparison of institutions under private and public control, and, second, a means of emphasizing the differences in objectives and scope of program between two-year and four-year institutions.

4/ Meeting the Increasing Demand for Higher Education in New York State.

6. RELATED ORGANIZATIONS

Several other agencies should be mentioned in describing the setting for higher education in New York State. These relate to and assist the colleges and universities in various ways. Some of these agencies have a statutory basis and others are voluntary, independent associations.

The New York State Dormitory Authority, State University Construction Fund, and the Higher Education Assistance Corporation are legally authorized agencies. The Dormitory Authority, a separate public benefit corporation within The University of the State of New York, aids publicly controlled institutions to finance dormitories and related facilities and privately controlled colleges to finance all types of buildings. At the end of 1962-63 it had completed, or had in planning, arrangements for bond issues amounting to $240,000,000 for public colleges and $67,000,000 for private institutions. The State University Construction Fund, also a public benefit corporation, receives and administers monies available to State University of New York for construction of all types of buildings. In its December 31, 1963 annual report, the Fund indicated that projects had been completed totalling about $65 million in costs, another $155 million of projects were under construction, and projects in the design stage had an estimated value of about $346 million. The Higher Education Assistance Corporation has a different purpose; namely, to guarantee loans through local banks to students who are residents of New York State to assist them in meeting expenses of higher education. Up to January 1, 1965 this non-profit corporation had guaranteed 166,786 loans for $128,695,722.

Notable among many voluntary organizations related to higher education is the Association of Colleges and Universities of the State of New York and its Commission on Independent Colleges and Universities. Both public and private colleges and universities belong to this organization, which with a headquarters office and a full-time executive secretary promotes the cause of higher education in the State. Other groups are the Conference of Catholic Colleges and Universities of New York State, the New York State Junior College Association, the State Association of Trustees of Two-Year Colleges, and the Council of Higher Educational Institutions in New York City.

7. CONCLUSION

The New York State constitutional and statutory system for higher education has provided the framework within which a strong system of colleges and universities has developed and flourished. The system is sound in principle and uniquely suited to the great diversity of needs, resources, and interests which exist in the Empire State.

In this unique legal federation of all its colleges and universities the State of New York has the structure and the basic resources necessary for planning and developing a system of higher education equal to the tremendous educational task ahead, and at a level that few states can match. The State's greatest weakness may well be its failure to make the most of the potential inherent in this legal structure for higher education.

PART II

NEW YORK STATE'S NEEDS IN HIGHER EDUCATION

More people, higher aspirations, more demanding job requirements--these are forcing every state in the Union to increase greatly the resources devoted to higher education. To do this will require mobilization of present resources in higher education for more efficient use and the addition of new resources as necessary, if a state is to meet the needs of the individual and also of the economy and the society. New York State must not only provide enough places for students; it must also develop the high quality and variety of educational programs required to prepare citizens adequately for this revolutionary century and beyond. Excellence is necessary in every category of education from technician training to post-doctoral research and from regular programs to single refresher courses. In addition to providing instruction, our colleges and universities must also increase research and community services to discharge their full responsibility to the people.

1. NEEDS OF THE INDIVIDUAL

Reduced to simplest terms, the needs of New York State for more higher educational opportunities are best expressed by estimating the number of persons who must be served, for their good and for the good of the State. Such an estimate must take into consideration two basic questions: (1) How many persons in New York State will there be in the foreseeable future who can successfully complete an education beyond the high school and by doing so be more productive and effective citizens? (2) How does this total reservoir of human talent compare in size with the actual enrollment of students likely to develop in New York State colleges and universities in the same period of time? As long as there is a difference in the size of the total reservoir of college-able persons and the actual enrollment, whatever the reasons may be to explain it, the Regents feel that the State's achievement in higher education is not at the level it should be.

To differentiate between these two groups, this Regents Plan terms the total reservoir of human talent capable of success in college study as "college-going potential" and designates the enrollment that is predicted as likely to develop in higher educational institutions in the State as "probable college enrollment." Attention now turns to the answers to the two basic questions just stated and to the interrelated implications of the answers to these questions.

The rising numbers of college-age youth and of high school graduates expected in New York State are shown in Figures 2 and 3. The increases of about 50 per cent from 1959-60 to 1969-70 and of about 80 per cent from 1959-60 to 1979-80 are impressive in themselves. Yet they do not tell the whole story. The magnitude of the task and the opportunity ahead is not reflected fully in these larger numbers but

FIGURE 2
Number of College Age Youth (18-21)
New York State, 1959 - 1979
(State Education Department Estimates, 1963)

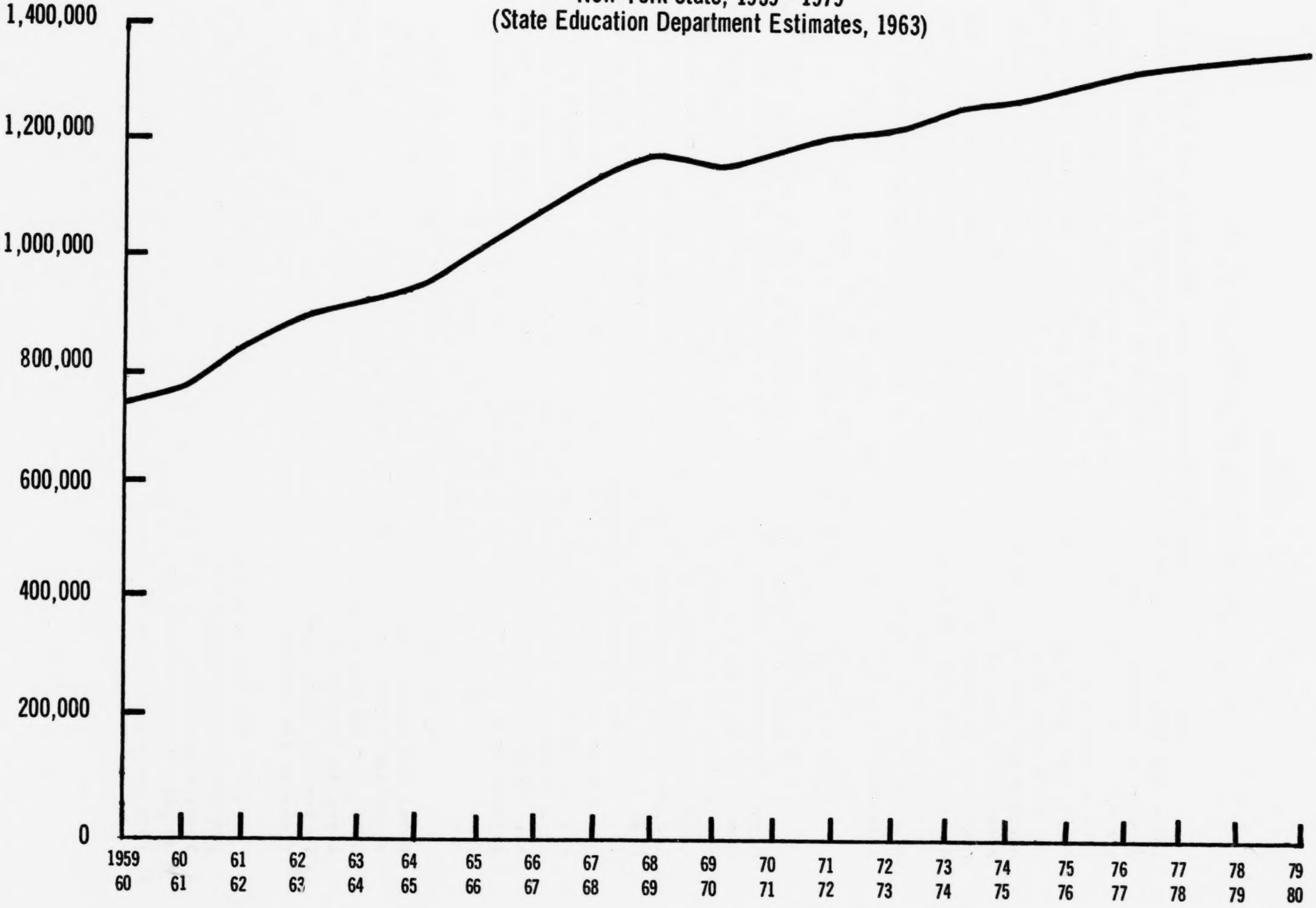
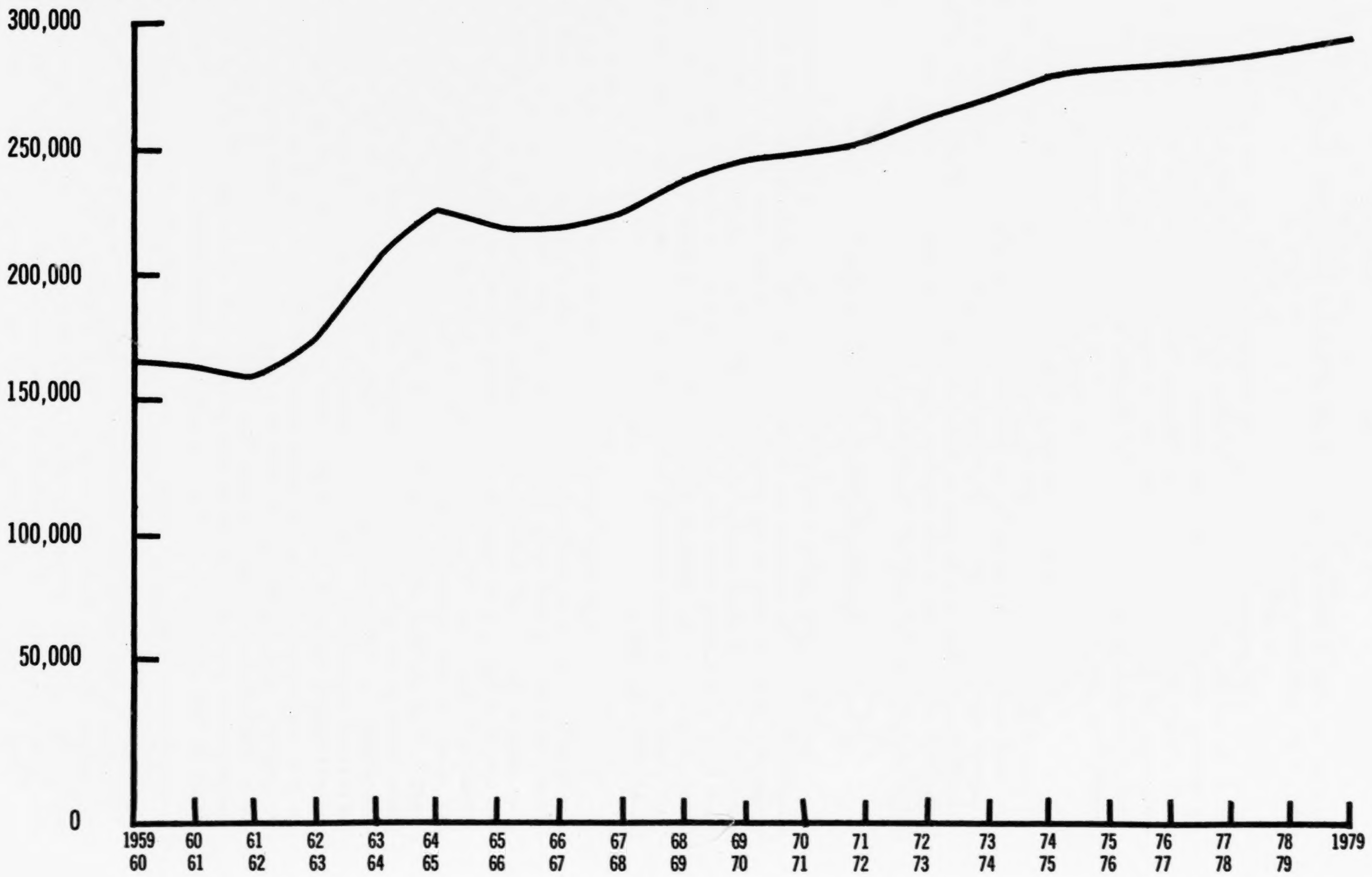


FIGURE 3
Number of High School Graduates
New York State, 1959 - 1979
(State Education Department Estimates, 1963)



rather in the higher aspirations of students and their families throughout the State and the nation.

College attendance and a college degree are as necessary today as high school attendance and a high school diploma were in the past. The economic, social, and cultural forces in our society are all pushing in this direction. People are looking to higher education as an appropriate means to satisfying and productive lives. Rising aspirations make education beyond high school conceivable for many and rising incomes make it possible.

Beyond having to serve a rapidly growing population and its rising aspirations for education, higher education must meet the steadily increasing demands for greater knowledge and a higher level of skills. A heavy responsibility for developing a thinking public and for building the necessary skills rests on the colleges. College enrollment, therefore, has been rising in recent years even when the number of high school graduates remained almost constant.

Potential for College Attendance

How many people should attend college or other post-secondary institutions? The answer to this question is, ideally, all who have the capacity and the desire to benefit from post-secondary instruction of any kind. Otherwise human resources are wasted and consequences develop for both the individual and the society which are costly beyond measure. Postponement of an all-out effort for higher education postpones the bill; but eventually when the bill has to be paid, it will have increased by a staggering amount.

The proportion of a population that has the ability and desire to benefit from post-secondary education cannot be determined precisely. Views on the subject vary widely. The Regents base their estimates on two approaches. One widely acknowledged measure is the conclusion reached by the President's Commission on Higher Education in 1947. After analyzing results of an extensive testing program, the Commission held that at least 49 per cent of our population had the ability to complete two years of post-high-school general and vocational studies and 32 per cent were capable of completing an advanced liberal or specialized professional education.[5] The 1947 Commission also concluded that these were conservative estimates. The second measure used by the Regents is the relationship between scores achieved by New York State high school seniors on the Regents Scholarship Examinations and their success in collegiate programs. The Regents Scholarship Examinations are the nearest approach to a statewide testing program now available in the State. This measure establishes an even higher potentiality than that resulting from application of the standards of the President's Commission on Higher Education.

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[5] Higher Education for American Democracy, a report of the President's Commission on Higher Education, Volume I, Establishing the Goals, pages 39-41. New York: Harper & Brothers, 1948. The Commission came to its conclusions after correlating (1) scores indicating the mental ability of our general population (Army General Classification Test scores) and (2) scores indicating reasonable expectations of completing college programs successfully (American Council on Education Psychological Examination - 1942 college edition).

The estimates of undergraduate college-going potential of 18-21 year olds within the New York State population based on these two measures are designated in this Plan as Potential A and Potential B. If the first measure (Potential A) turns out to be the correct one, some 480,000 persons could be in college on a full-time basis by 1970 and 547,000 by 1980; if the higher potential (Potential B) were to be reached, these figures would become 612,000 and 708,000.

Probable College Attendance

But what will actual college enrollments in the State likely be? How will these compare with the suggested "potential" or "ideal"? Actual undergraduate enrollment in New York State has fallen far short of the "potential" based on even the lower of the two measures described. In 1963-64, enrollment of full-time undergraduate students was nearly 150,000 under the estimate based on an application of the 1947 Presidential Commission standard of college potential to New York State population. The addition of part-time enrollment to full-time enrollment still leaves a gap of approximately 65,000, and further adjustments for migration of students in and out of the State does not reduce the gap substantially.

To project actual college enrollment is difficult because of the number, variety, and uncertainty of the variables which may affect the demand for college places. In order to test the consequences of alternative assumptions, two projections were made. One was based on the average trend of actual enrollments over the past five years, and the second was based on the more rapidly accelerating rates of the last two years and on optimistic assumptions of capability of the State's colleges and universities to expand to handle students as rapidly as they may demand admission to college. The result of applying these two projection techniques to full-time undergraduate enrollment and to full-time enrollment of all students is shown in Figure 4. By the end of the decade, the State can expect between 431,000 and 445,000 full-time students in college. This represents an increase of between 43 and 50 per cent over the fall of 1964.

The two estimates of undergraduate "probable enrollment" are related to the two estimates of "college-going potential" as shown in Figure 5. The implication of this comparison for the effort the people of the State should make in higher education is striking. There is a dual job ahead--formidable in both of its aspects. One is actually to enable the colleges to accomplish their planned enrollment objectives and thus bring the estimates of "probable enrollment" to fruition; the second is to enlarge the "probable enrollment" as much and as fast as possible in order to come close to the "ideal" as expressed by "college-going potential" in the State.

FIGURE 4
Full-Time Fall Enrollment,
All Students and Undergraduate Students,
in New York State Institutions
1960-64 Actual, 1965-78 Projected

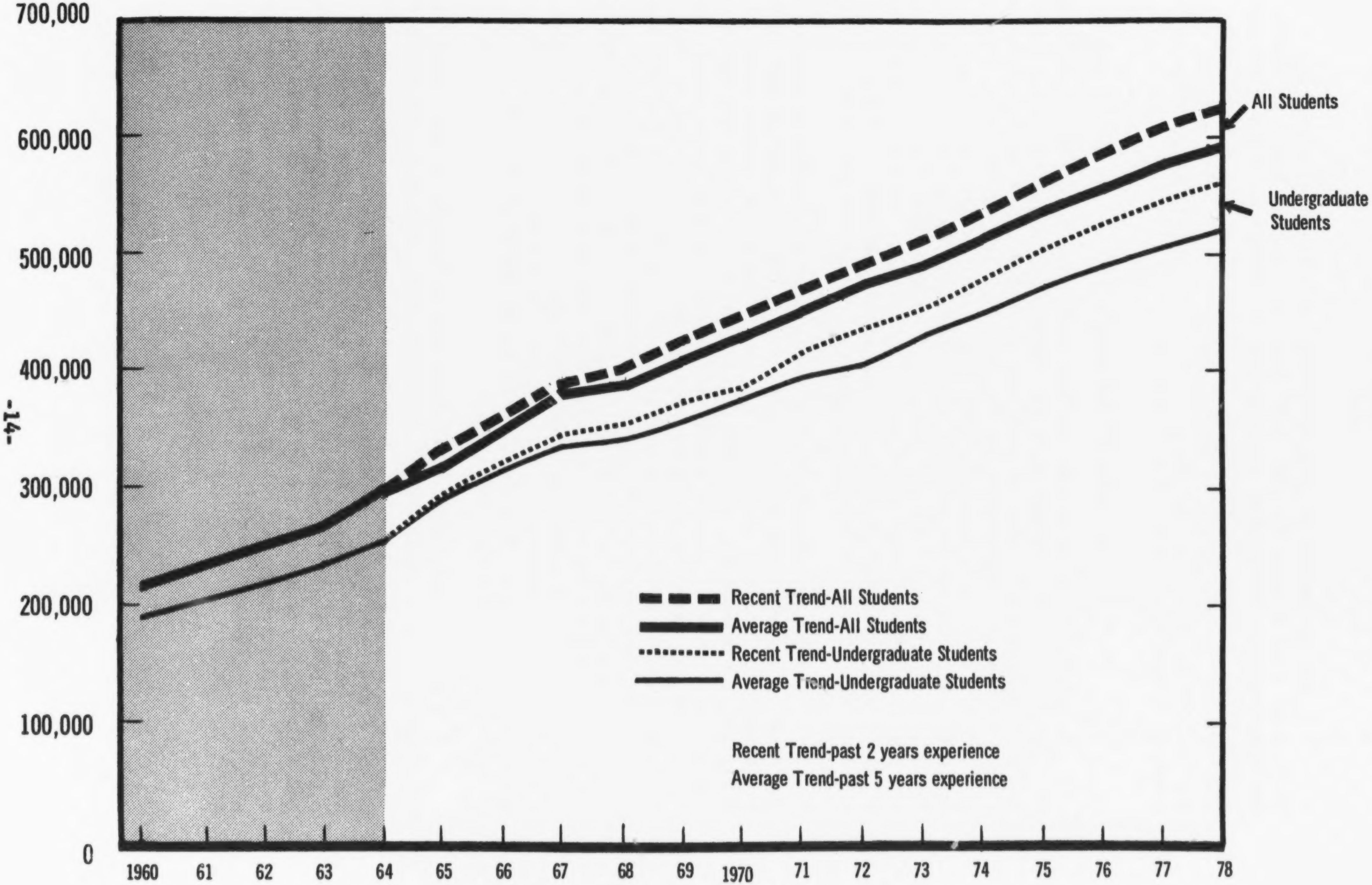
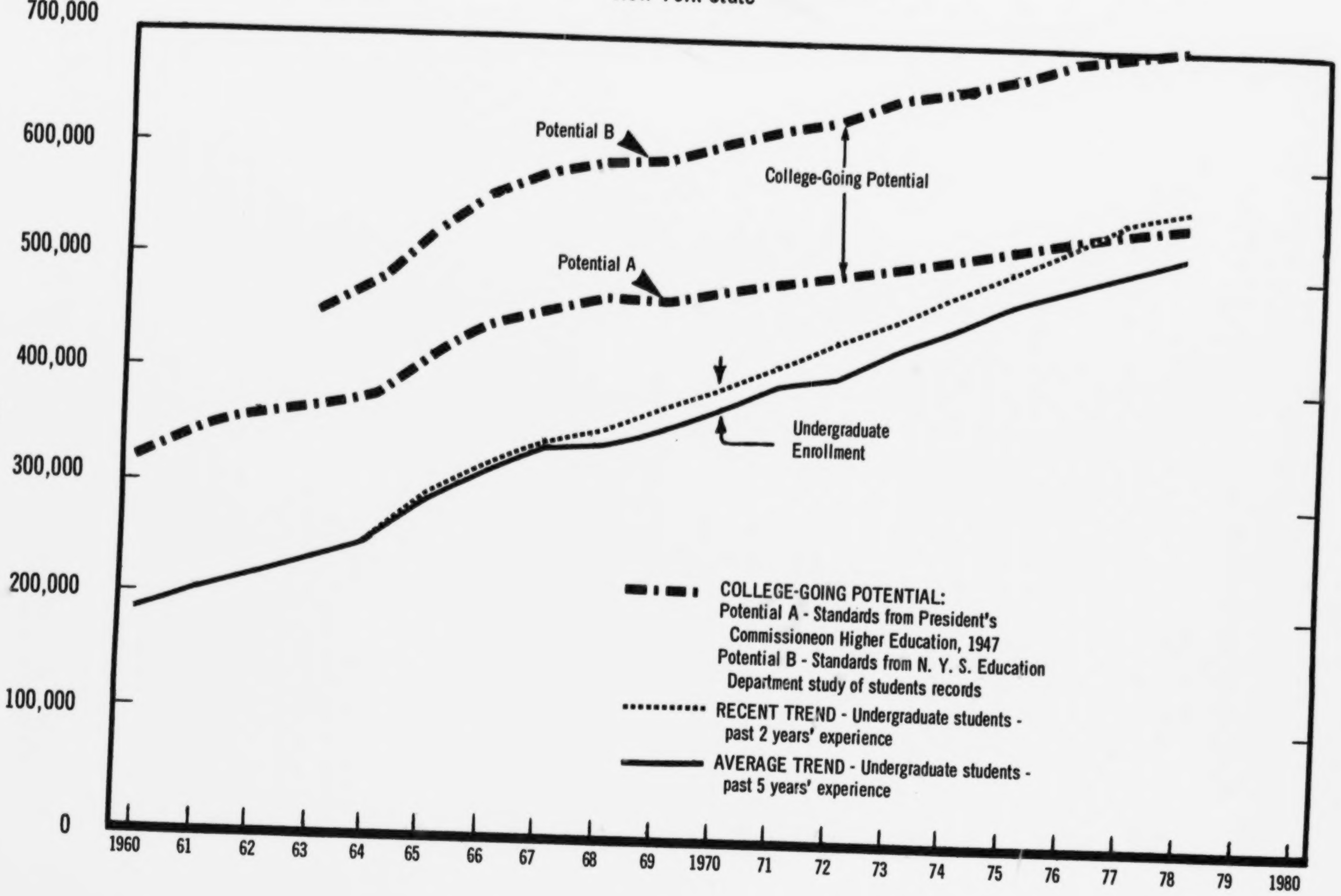


FIGURE 5
Estimates of College-going Potential
and Probable Full-Time Undergraduate Enrollment
New York State



Probable Enrollments, by Classifications of Institutions

The projections of probable statewide enrollment were carefully made and give a realistic figure of the total full-time enrollment that can be expected. However, there is still another question: What portion of this statewide enrollment is to be accommodated by different institutions and categories of institutions in New York State? Estimates of full-time enrollment to be expected in the several New York State categories of institutions from 1964 to 1970 which can be used with reasonable confidence as a basis for planning are summarized and presented graphically in Figures 6 to 8. These estimates were made by extrapolating recent enrollment trends by categories of institutions, adjusting these trends for probable changes, and applying the resulting shares of full-time enrollment to the average trend projection of statewide enrollment discussed above.

The magnitude of the task just ahead and the increasing role expected of the two-year institutions are shown graphically in Figure 6. Total full-time enrollment will increase nearly 45 per cent between 1964 and 1970. That in two-year colleges will jump almost 100 per cent. Figure 7 graphically presents enrollment as it is likely to be distributed among different groups of two-year institutions, while Figure 8 shows how enrollment in four-year institutions is expected to be distributed among the privately controlled institutions, City University, and State University.

Some Regional Variations

New York State is a composite of social, economic, and geographic regions, each with a different pattern of likely future development. This fact was recently described in vivid fashion by the Governor's Regional Planning Commission.[6] Higher Education in New York State must be prepared to cope with wide variations in the number of students residing in different regions, as well as with other differences among the regions. Variation is striking among the regions, for example, in the numbers of residents of the different regions who are attending college anywhere (in the State or outside); in this report the number of such students for a given region is called "enrollment originated." The New York Metropolitan Area, which was the residence of nearly 100,000 full-time undergraduate college students in 1963, is at the top of the list in student members, while the Northern Region, with fewer than 5,000 students residing in its boundaries, is at the bottom. As already stated, these students may seek college attendance at colleges within the region, in other regions within the State, or indeed, outside the State entirely. The amount of "enrollment originated" is important for evaluating regional needs for expansion in higher education in each region, and for recognizing the implications of differential rates of growth. Table 1 presents data for the twelve regions into which the State has been divided for higher education planning purposes, and makes clear the regional pattern of the demand for higher education as measured by the residence of the student.

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[6] Change/Challenge/Response: A Development Program for New York State. Office for Regional Development, Albany, 1964.

FIGURE 6
Distribution of Full-Time Graduate and Undergraduate Enrollment into 2 and 4-year Institutions New York State

(Estimates for 1965 to 1970 based on average trend projection of total enrollment.) (Figures in thousands)

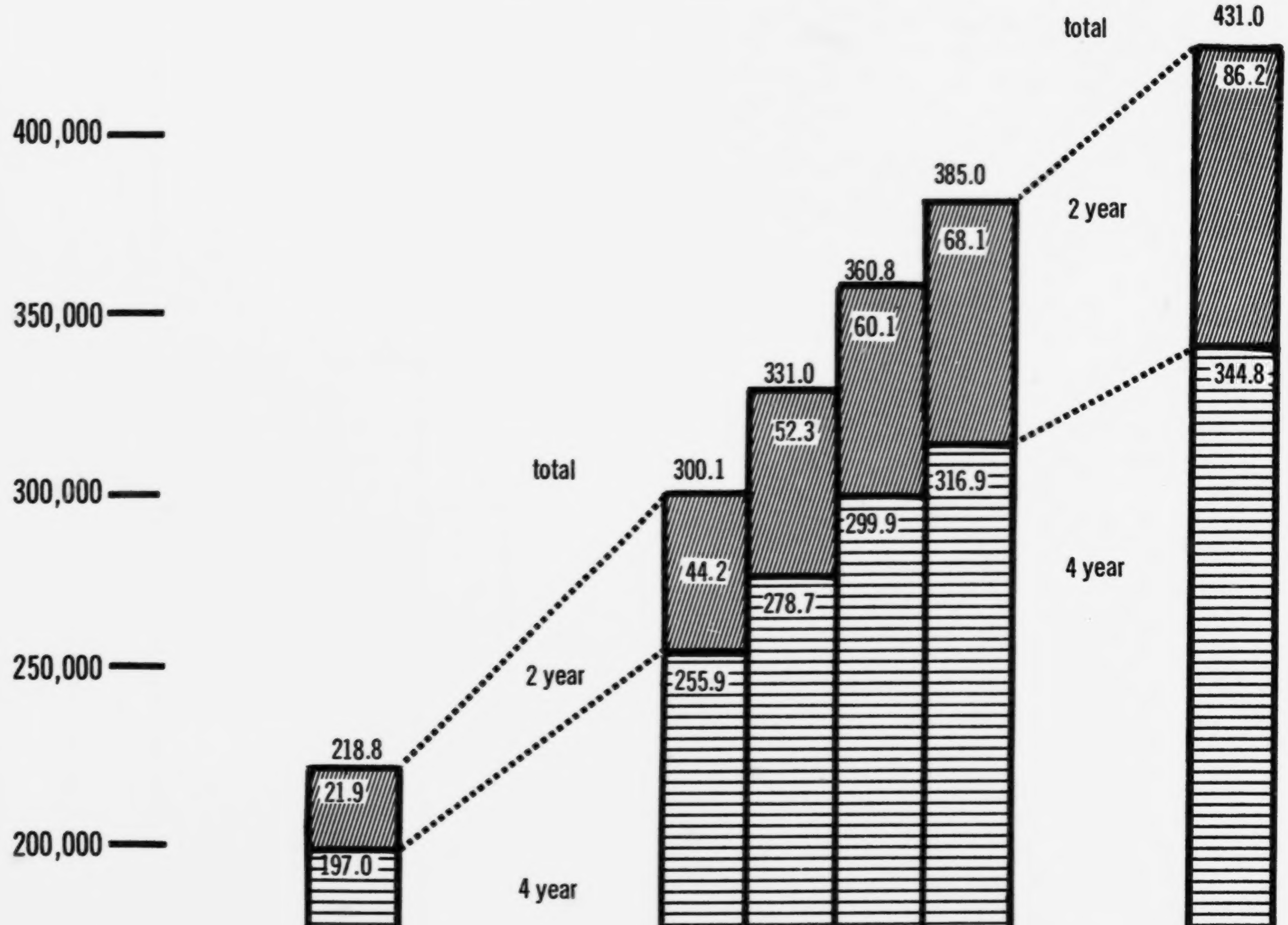


FIGURE 7

Distribution of Full-Time Undergraduate Enrollment in 2-year Institutions, New York State

(Estimates for 1965 to 1970 based on average trend projection of total enrollment.) (Figures in thousands)

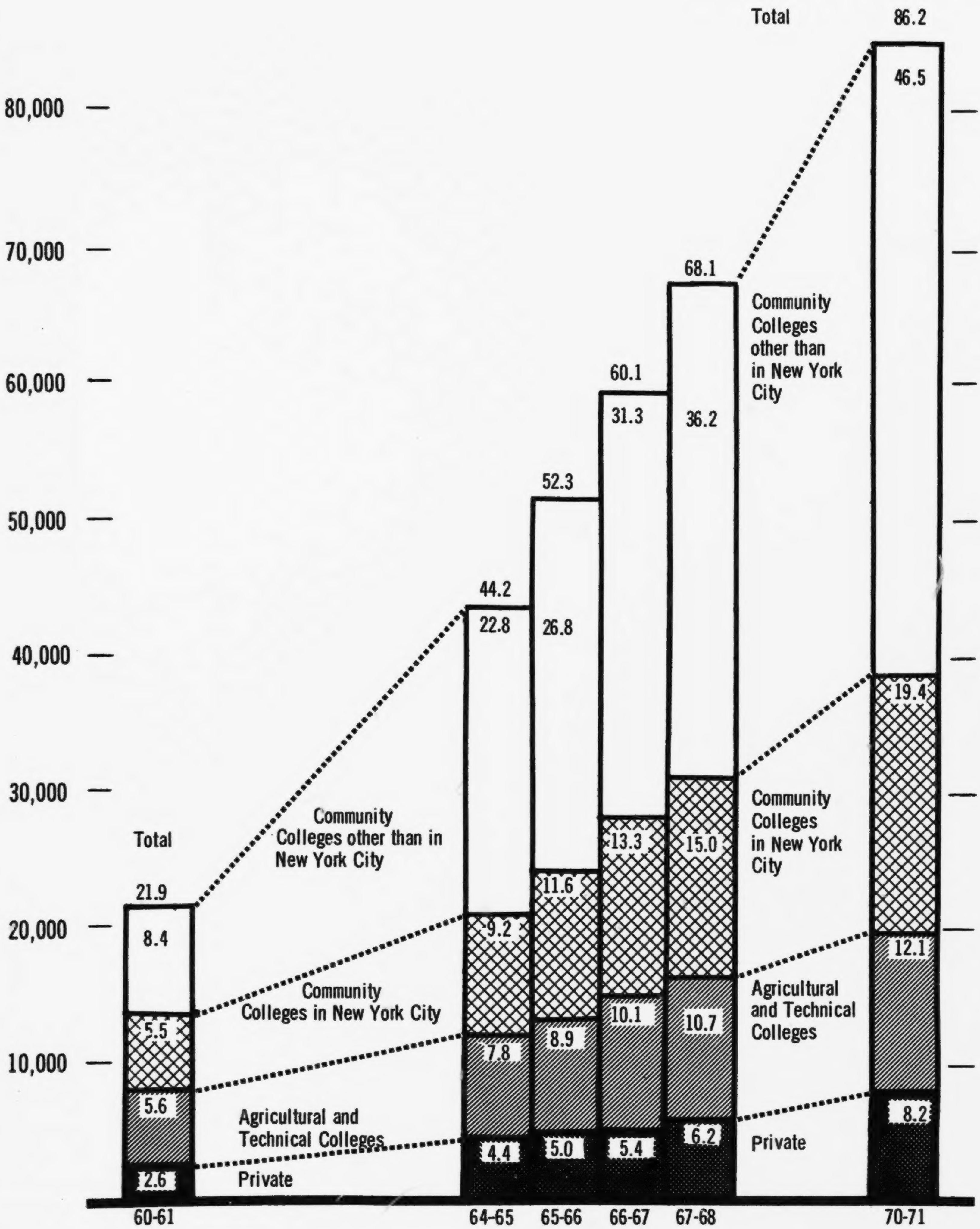


FIGURE 8
Distribution of Full-Time Graduate and Undergraduate Enrollment in 4-year Institutions, New York State

(Estimates for 1965 to 1970 based on average trend projection of total enrollment.) (Figures in thousands)

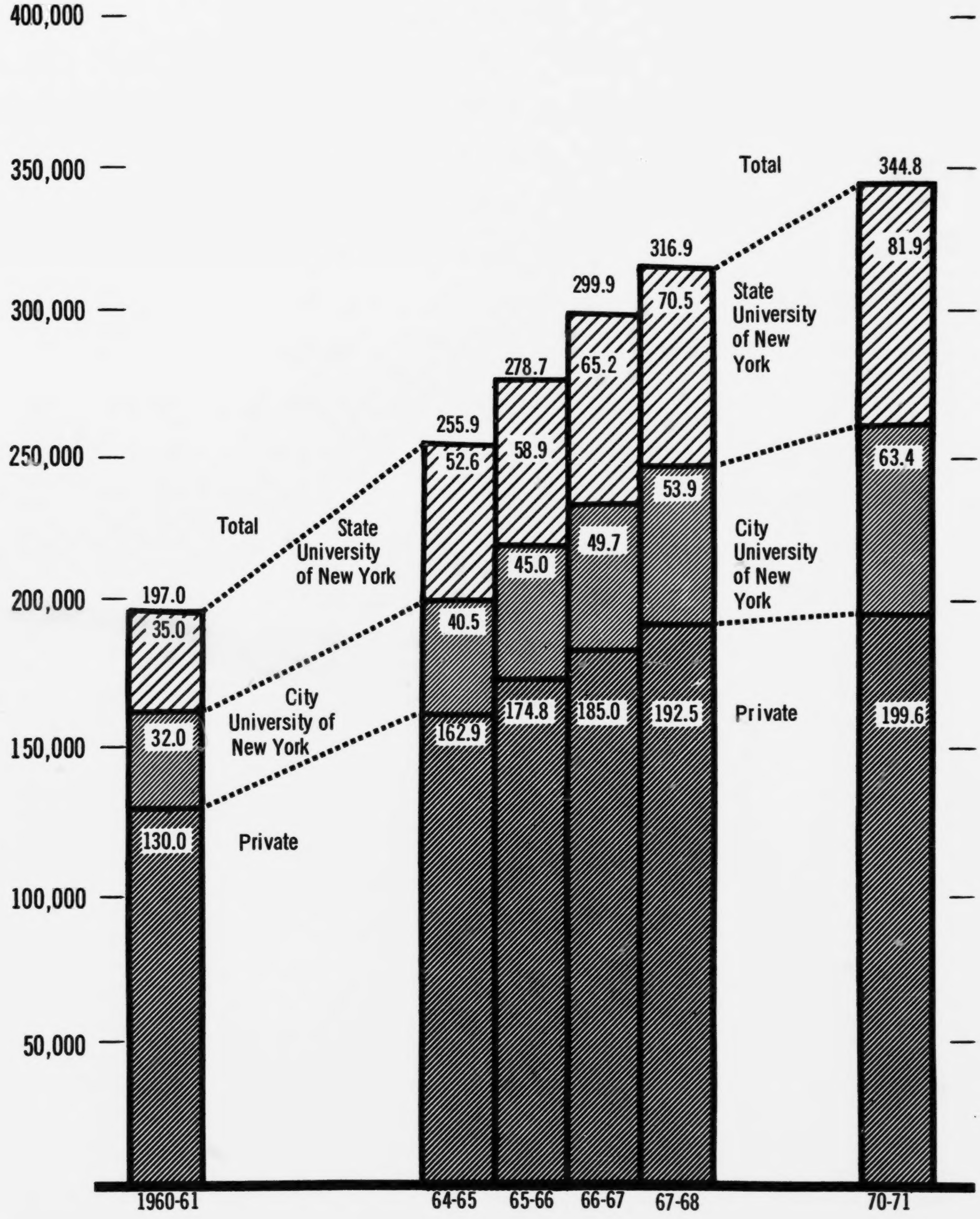


Table 1--Estimated Undergraduate Enrollment Originated in New York State by Economic Regions

Region	Estimated Enrollment			Increase	
	1962	1965	1970	1962-65	1965-70
Binghamton	5,325	6,406	7,851	1,081	1,445
Buffalo	21,934	25,756	34,603	3,822	8,847
Capital District	11,866	13,840	17,316	1,974	3,476
Elmira	5,513	6,434	8,028	921	1,594
Mid-Hudson	9,734	11,701	15,384	1,967	3,683
Mohawk Valley	5,915	7,115	8,854	1,200	1,739
New York Metropolitan	157,929	186,577	236,868	28,648	50,291
New York City	(99,842)	(112,859)	(133,654)	(13,017)	(20,795)
Long Island	(39,980)	(52,151)	(74,197)	(12,171)	(22,046)
Rockland-Westchester	(18,107)	(21,567)	(29,017)	(3,460)	(7,450)
Northern	4,836	5,613	7,016	777	1,403
Rochester	11,713	14,276	18,465	2,563	4,189
Syracuse	10,147	11,915	16,131	1,768	4,216
State Total	244,912	289,633	370,516	44,721	80,883

Migration of students to attend college within the State and outside is very large. It reflects students' preferences for institutions, programs, and geographical locations, as well as relative costs of attendance, the pressure to gain acceptance at a particular institution, and institutional choices. The needs of individuals can be served most economically when students are not forced by program or space limitations to migrate across the State or across the nation to find an institution which can supply the education desired. More detailed discussion of the migration patterns of New York State college students will be presented in Part V.

The salient points of the foregoing discussion of statistics on college enrollment and college places in New York State can be summarized as follows. By 1970 it is expected that the number of college-age youth (18-21-year-olds) will total 1,200,000. In that year the number of high school graduates will be almost 250,000, or for four years aggregated, nearly 1,000,000. From this basic population group, it is estimated that there is a college-going potential of between 480,000 and 612,000 persons. Not all of these potential college students will enroll, however, unless there are changes in attitudes toward college attendance held by the general public, or more importantly, by certain sub-groups within the general society; in present practices in college admissions; and in character of programs of post-secondary school education available. At the same time, it should be observed that some persons beyond typical college age will enroll in college. Taking all this into account, it is estimated that by the end of the decade, between 431,000 and 445,000 full-time students will be in college. Thus the gap between potential and probable in 1970 will range between 49,000 and 181,000. Plans currently reported by private higher educational institutions, State University of New York (including the community colleges), and City University of New York, if implemented fully, indicate that places enough to accommodate the higher of the projected probable enrollments will be available in 1970. The approximate percentage of the total enrollment expected in 1970 is estimated for each major segment of higher education as follows: private colleges and universities, 48 per cent; State University of New York four-year units, 19 per cent; City University of New York four-year units, 15 per cent; and the public two-year colleges, 18 per cent. If this enrollment is reached, significant progress toward moving the probable toward the potential college enrollment will have been achieved.

2. NEEDS OF THE ECONOMY AND OF SOCIETY

There is another way to describe the needs for higher education. This is to point out the needs of the economy and society for trained manpower to fill its many jobs. In the broadest sense, the task of the educational institutions will be to fit a growing and changing labor force into the growing and changing kinds of occupational positions. Beyond this, it is to identify and train leaders for society's future. This Plan is not the place, even if space permitted, to engage in a detailed analysis of the trends in the composition of the labor force and in manpower requirements which are placing new demands upon institutions of higher education. Analyses of this kind are well publicized in such reports as Jobs 1960-70:The Changing Pattern, published by the New York State Department of Labor, the various studies and reports of the U. S. Department of Labor, and special studies by interested groups.

The results of these various analyses are in general agreement and the trend can be summarized as follows: The kinds of occupations which will experience the most rapid expansion are those in the professional, higher level managerial and technical areas, and these in turn call most heavily on the institutions of education beyond the high school. Figure 9 shows graphically the future look for occupational change and the growing stress on manpower with advanced training. Also, at least for the remainder of this decade, the changes in the labor force will result in a relative scarcity of men and women in the prime working ages. The manpower development task of the educational institutions, therefore, will be to fill this gap by expanding their ability to prepare four groups of people to hold productive and responsible positions at higher levels in the job scale: the youth, the older worker, the nonwhite worker, and the woman who seeks a return to remunerative employment.

Specialized Manpower Needed

The most rapidly growing category of occupations is the technical and professional. Entry into these occupations places the greatest demand on college and university facilities. The preparation needed is specialized, complex, and frequently lengthy.

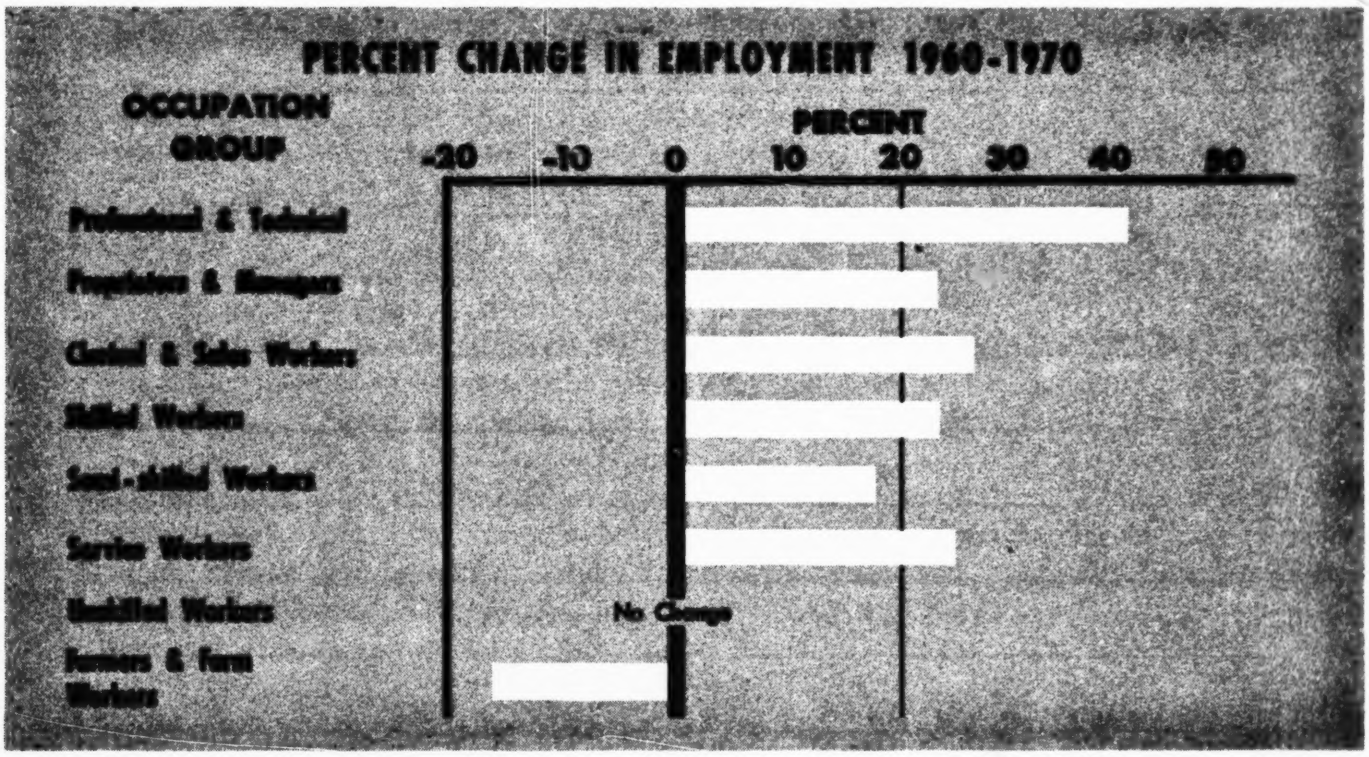
Most rapidly growing occupations will be in the areas of college faculty, engineering, physical and biological sciences, and interdisciplinary scientific positions. These occupations will also place the heaviest pressures on advanced training facilities for work at the doctoral level and beyond.

The health professions will experience nearly as large an expansion, and, if the best of available medical care is to be extended to a larger proportion of the growing and aging population, a much greater expansion will be needed.

The professional opportunities in law, accounting, library science, and social science will increase somewhat less rapidly than those listed above, but at a rate well above that of the general expansion of employment and, likewise, will require vigorously expanded undergraduate, graduate, and professional educational facilities.

Table 2 indicates the relationship between the estimated annual need of selected professional occupations and the number of first degrees awarded in 1962. Even if all recipients of first degrees in these selected fields enter employment in this State (an expectation that cannot realistically be held), they will by no means meet our needs. An

FIGURE 9
Growth of Occupational Groups, 1960-70, and Years of Education Completed



Average years of school completed of those working in 1959

Occupation Group	Years
Professional & technical	16.2
Proprietors & managers	12.4
Clerical & sales	12.5
Skilled	11.0
Semi-skilled	9.9
Service	9.7
Unskilled	8.6
Farmers & farm workers	8.6

Source
U. D. Department of Labor

Table 2--Estimated Annual Needs in Selected Professional Occupations and Degree Production in Related Academic Fields in New York State

Occupation	Est. Annual Need	No. of 1st Degrees Awarded, 1962	% Increase Needed
Accountants & Auditors	4,900	1,651	197
Architects	270	146	85
Dieticians	350	19 1/	1,742
Engineers	8,650	3,010	187
Health Sciences			
Dentists	570	236	142
Nurses	4,900	3,482 2/	41
Pharmacists	540	455	19
Physicians	1,425	947	50
Lawyers	2,140	1,314	63
Librarians	561	325	73

1/ Refers to degrees in Food and Nutrition in Home Economics programs.

2/ Graduates of Diploma, Associate Degree and Baccalaureate Degree programs for the year ending June 30, 1962.

expansion, in some cases reaching very high proportions, must be undertaken. The need for accountants and auditors, for example, is triple the number of degrees awarded.

The technical or semi-professional occupations also will be expanding at very high but not uniform rates. It is difficult to draw a clear line of distinction between these occupations and those of the engineer or scientist at one extreme, and the semi-skilled or craft occupations, at the other. These occupations are closely related to the engineering and scientific occupations, since the technicians both assist and, in some cases, replace higher level technical employees. However, under careful and rigid definitions recent studies indicate that nearly 150,000 people are employed in technical occupations in New York State. Recent evidence indicates that employers were actively seeking to recruit nearly 5,000 technical and semi-professional workers, which is a measure of the presently unfilled need.7/ This demand will further increase with the over-all expansion of technical and professional employment in the State. Table 3 indicates some of the areas of high-level employment.

College Faculty--A Special Case

Faculty is the key to quality as well as quantity of opportunity in higher education. Colleges and universities in New York State historically have been able to attract able and dedicated teachers, scholars, and researchers. That they will continue to be able to do this depends much on the steps taken now with an eye to the future needs of the State.

That the need for more college faculty is outstripping the supply is generally recognized as a nationwide problem.8/ Concern about a concomitant decline in quality of faculties has increased in recent years. More and more, colleges and universities are having to hire persons with lower qualifications for academic work. The National Education Association's latest nationwide study of this matter found, for example, that whereas in 1953-54 some 31 per cent of new college teachers in institutions with programs of four years or more had earned doctor's degrees, the proportion had decreased in recent years to approximately 25 per cent; the percentage of new teachers having no formal education beyond the master's degree, on the other hand, has jumped from 32 per cent in 1953-54 to 40 per cent in 1961-63.

Comparisons of faculty in New York State colleges and universities with those of institutions included in the National Education Association nationwide study were made possible by cooperation of the national association. The eighty-five New York State institutions participating

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7/ Technical Manpower in New York State, Volume 1, Chapter II, Table D. Forthcoming publication of N. Y. State Department of Labor.

8/ Ray C. Maul, Teacher Supply and Demand in Universities, Colleges, and Junior Colleges, 1961-62 and 1962-63. Research Report 1963-R3 National Education Association, Washington 36, D.C.

Table 3

Employment in Technical Occupations
New York State, 1962

	Number	Per Cent
Draftsmen	20,972	14.1
Structural Design Technicians	2,516	1.7
Electronic or Electrical Engineering Technicians	19,585	13.2
Mechanical or Electro-Mechanical Technicians	22,446	15.1
Mathematics Technicians	831	.6
Physical Science Technicians	8,969	6.0
Biological, Medical, Dental, and Related Science Technicians	25,445	17.1
Industrial Engineering Technicians	6,901	4.7
Civil Engineering and Construction Technicians and Specialists	13,464	9.1
Sales and Service Technicians	1,932	1.3
Technical Writing and Illustration Specialists	3,034	2.0
Safety and Sanitation Inspectors and Related Specialists	4,084	2.7
Product Testing and Inspection Specialists	8,059	5.4
Data Processing Systems Analysis and Programming Specialists	6,153	4.1
Airway Tower Specialists and Flight Dispatchers	1,373	0.9
Broadcasting, Motion Picture & Recording Studio Specialists	2,920	2.0
	148,684	100.2

Source: Forthcoming publication of New York State Department of Labor, Technical Manpower in New York State, Vol. 1, Chapter II, Table D.

in the nationwide study indicated that colleges in this State, in comparison to like colleges nationwide, have been generally successful in recruiting competent and qualified staff through the fall of 1962 (the latest year of available statistical data for this comparison). In the fall of 1962, approximately 57 per cent of the faculty in private four-year colleges in New York State had the doctorate as the highest earned degree, 62 per cent of those in City University of New York four-year units, 50 per cent in State University of New York four-year units outside of the contract colleges, 14 per cent of the private two-year colleges, and 12 per cent of those under public auspices. These statistics compare quite favorably with national statistics for similar categories of institutions.

Examination of some trends in recruitment of new faculty in New York State institutions in comparison again with like institutions in the nationwide study brings out some warning signals. The private universities, for example, in 1961-62 and 1962-63 employed a smaller percentage of new faculty with earned doctorates than their counterparts on the national scene. Consequently they employed proportionately more persons whose highest earned degree was the master's. The four-year units of State University of New York also followed this pattern with even larger differences seen between these colleges and state colleges in the nationwide study.

A comparison of New York State's recruitment of faculty in various subject matter fields and the national pattern shows the task ahead. Out of a total of 23 groupings of academic fields, the ten demanding the greatest numbers of new faculty by 1970 will be the biological sciences, business and commerce, education, engineering, English, fine arts, foreign language, mathematics, physical sciences, and the social sciences. This does not mean that these are all areas of present or projected shortage. It does indicate, however, that graduate education should give additional emphasis to these areas if faculty supply is to maintain or improve present levels of professional competence. Critical fields of shortage, both for the nation and for colleges in New York State, exist in the biological sciences, English, foreign languages, mathematics, physical sciences, and some fields in the social sciences, such as economics and sociology.

Within the group of community colleges and technical institutes a special area of critical shortage exists: instructors in fields which train technicians and semi-professional personnel. The public two-year institutions are recognized as the chief source of supply for these kinds of workers, but the sources of supply of instructional personnel to staff the programs are woefully few and weak.

The big push for new faculty members in New York State colleges and universities is just ahead. It will occur in the period of 1964-68 during which the large jumps in enrollment already reported will occur. The dimensions of the increase expected between 1963 and 1970 are shown in Figure 10. By the end of the decade, the State will need almost a third more full-time faculty in its higher educational institutions than it had in 1962.

Full Use of Human Resources

No examination of the needs of the economy and of society would be complete without reference to potential waste of human resources through lack of training for special segments of our population.

The U. S. Department of Labor estimates that between 1960 and 1970 women in the labor force will increase at a rate almost double the rate for men. Many of these potential workers will be women returning to the labor market after careers as homemakers. In these cases the training and experience of ten to twenty years before will need marked updating, perhaps on a part-time basis, so that the skills can be put to current use.

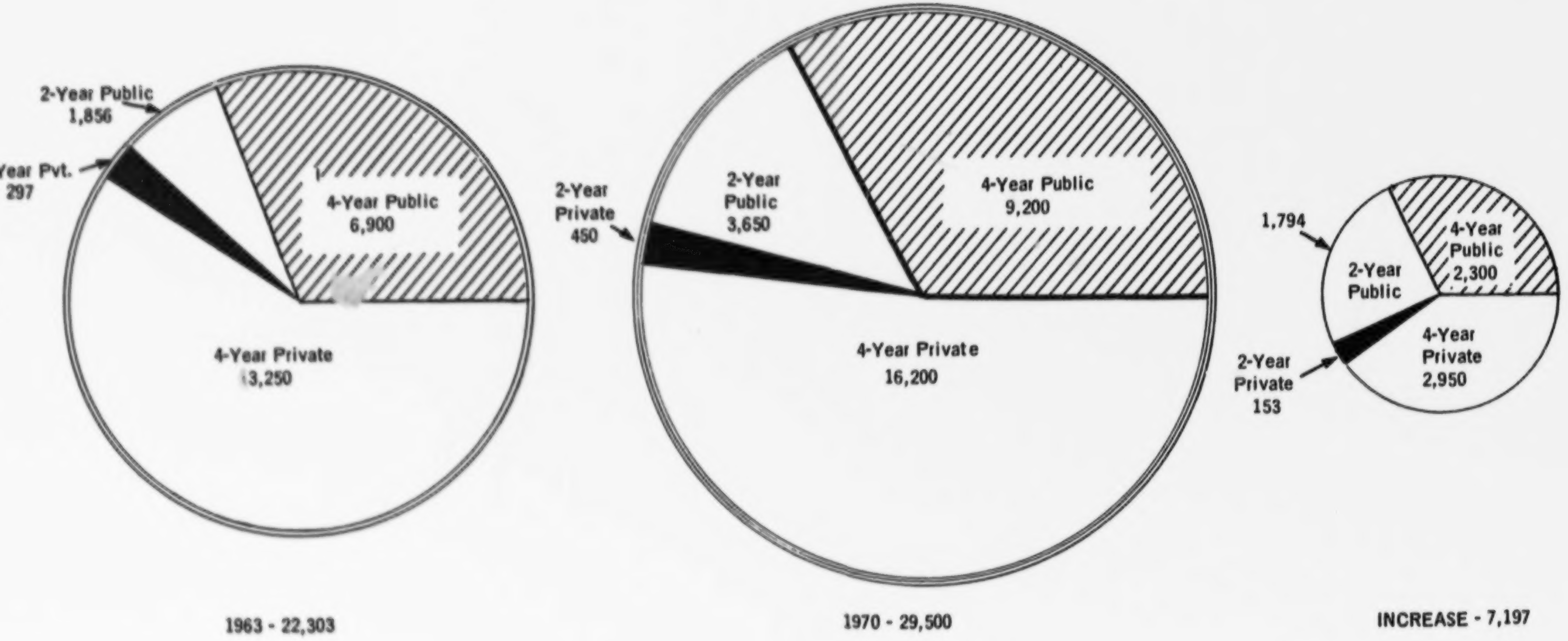
A more basic need is to prepare the coed of today so that fifteen or twenty years hence she will be able to return effectively to the labor market with a minimum of additional training. For these, no less than for the "career" woman, the need is to plan in college for a career rather than a job, to maintain high-level academic performance, and to continue into specialized training at the graduate level whenever possible.

The greatest waste of human resources in society today occurs in the nonhite, minority, and culturally deprived groups, for whom education represents almost the only peaceful means of breaking out of the deprivation in which they live. The New York State Department of Labor has estimated that by 1970, nonwhites will constitute 12 per cent of the labor force of the State, as compared to 10 per cent in 1960. Recognition and development of the abilities available in the nonwhite and other minority groups to fill the kinds of positions most needed in our economy is a task and a challenge to all the people of the State. Leaders in higher education have a particular responsibility here. Although the State as a whole is concerned, the most acute need for action is local and regional, necessarily centering in the large cities. The problem in the elementary and secondary schools has been placed dramatically before us in recent years, but it is no less important for technical, general, and professional programs beyond the high school.

Maintenance of Skills and Abilities

Education is now a continuing task for most people. Today's most effective undergraduate, graduate, and professional education programs prepare the student to prepare himself. Educational institutions must, therefore, be alert to assist in the continuing self-education needed by individuals in a dynamic society. The needs of unemployed workers already "automated" out of their positions have to be met as well as the needs of

FIGURE 10
Full-Time Faculty, Higher Institutions, New York State
1963 Actual - 1970 Estimated



a host of additional workers whose present type of employment will eventually disappear. Today's professional, technical, and managerial personnel face particularly acute requirements in this area of continuing education because new knowledge and new techniques are emerging at a rapid pace in every field. The need for conferences, institutes, workshops, independent study with guidance, and regular classwork for credit or without credit, will bulk large in the years ahead if our colleges and our universities are to discharge their obligations to individuals and to society.

3. CONCLUSION

To provide the quality and quantity of higher education which the citizens expect and society requires will tax both the private and public facilities now in existence and planned to 1970. All types of post-secondary institutions and most types of programs will be under continuous pressure to accommodate the numbers of youth arising from the post-World War II population increase. Adding to the demand will be the growing proportion of the population, youths and adults, seeking further education both as an end in itself and as a means for achieving or holding a position in a competitive society.

By 1970, it is expected that full-time enrollment will reach 431,000, which is an increase of nearly 100 per cent over 1960 and more than 40 per cent over 1964. The rise of part-time enrollment is expected to be almost as great, so that by 1970, New York State colleges will be expected to accommodate about 800,000 full- and part-time students. Full-time undergraduate enrollment, high as it promises to be, still will not include about 20 per cent of the persons who could complete a college program. A continuation of recent trends will not bring a closing of the gap between estimated full-time undergraduate enrollment and a conservative estimate of college potential until late in the 1970's.

The importance of graduate education, including doctoral and post-doctoral study, will continue to be critical. Graduate education not only supplies the high-level technical and professional personnel increasingly in demand by business, industry, and government, but also supplies the faculty in all fields of the arts, sciences, and humanities required to maintain, expand, and improve all of education.

PART III

REGENTS GOALS FOR EDUCATION BEYOND THE HIGH SCHOOL

Cooperative planning is impossible in the absence of generally agreed-upon goals. In the light of the needs summarized in Part II, the Regents have adopted the following objectives as a general guide for the further development of higher education in the State of New York:

1. Equal and open educational opportunity beyond high school for each qualified person who desires such education, the opportunity to be unrestricted by race, creed, or national origin, and to be available until each person's needs for economic and social self-sufficiency are met.

2. A system of post-high school education through graduate and professional levels that will meet New York State's needs for trained manpower and higher educational services related to business, economic, and industrial development, to maintain the State's position of leadership nationally and internationally.

3. Continued growth in extent and quality of service by New York State colleges and universities to meet the State's and nation's requirements for research and development equal to the demands of this new age marked by cultural, scientific, and technological revolutions.

4. Equalization of post-high school educational opportunity available in each economic-geographic region so that factors of cost and accessibility are more even throughout the State.

5. Full and efficient use of available resources in privately and publicly controlled colleges and universities, as well as other units of The University of the State of New York, such as museums and libraries, by encouraging both individual and collective institutional steps toward expansion, cooperation, and continued improvement.

6. Expansion and strengthening of State University of New York and City University of New York to enable each to take a position of leadership among the nation's public universities, plus a comparable effort directed to the community colleges, to round out the State's system of public higher education.

7. A program of financial support both to public institutions and to individual students which will enable each qualified student to choose an institution appropriate to his needs and interests rather than on the basis of costs.

8. Acquisition of sufficient faculty, facilities, and budgetary support to meet the State's total needs in higher education in respect to both quantity and quality.

9. Acceleration of planning for higher education through an improvement in both quality and quantity of information relating to problems and programs, especially financial, and a more effective communication between State agencies and the individual institutions.

10. Continued improvement in communications between the Regents and college and university leaders, and between the Regents and leaders of state and local government, so that all of these leadership groups will be continuously well informed on any new developments and critical needs in higher education.

PART IV

REGENTS' REVIEW AND APPROVAL OF INSTITUTIONAL PLANS

The amendment to the Education Law, 1961, requires the Regents (1) "to review and act upon the proposed plan and recommendations of the State University Trustees and of the Board of Higher Education of the City of New York", (2) to "evaluate all available information with respect to the plans and facilities of private institutions" and then (3) to prepare "a tentative Regents plan...for the expansion and development of higher education in the State." The tentative plan is then to be shared with the public through hearings as well as with the boards of control of all colleges and universities. The final version is to be transmitted to the Governor and the Legislature as the Regents Plan for the Expansion and Development of Higher Education.

Part IV is devoted primarily to the first of these responsibilities, namely, the review of the plans of the two public universities. The plans of the privately controlled institutions are referred to at the close of Part IV, but because there is no single comprehensive plan to consider, the contributions of these various institutions are discussed in several sections of Part V.

The plans of the community colleges appear in the long-range plans of the two public universities, since all are under the general supervision of the Trustees of State University, and six of them, located in New York City, are sponsored by the Board of Higher Education of the City of New York. The Regents wish to give the strongest possible support to both the State University Board of Trustees and the local boards of trustees in their efforts to improve and further develop these institutions. The community colleges, forming the fourth main sector of The University of the State of New York, are of critical importance. They serve the other three sectors through their college transfer programs. They serve the community and State through programs preparing for a wide variety of occupations in the fields of health, business, industry, and government. Finally, they provide opportunity for large numbers of students who, for economic or other reasons, must find post-secondary education within commuting distance of their homes.

The development of comprehensive community colleges under the program of State University is of such importance to the total effort in higher education that the Regents issued, during the past year, a policy statement in strong support and have added it to this plan as Appendix F.

The main proposals or recommendations which occur in the summary of the Master Plan of State University are reprinted here and the Regents' position on each is indicated. The same procedure has been adopted to give the Regents' position on the Master Plan of City University. In this case a list of the main proposals was prepared by excerpting sections from the body of the text.

Both plans include a number of proposals which are extremely important for statewide long-range planning and which the Regents approve. These are indicated by the symbol (A). In addition there are a number of statements which are essentially broad objectives or goals. The endorsement and support of the Regents are indicated by the symbol (G). In these instances the Regents expect that after further study and planning, schedules and specific steps for implementation will be proposed. The Legislature made provision for proposing amendments and for an annual report from the Regents summarizing such additions to the Regents Plan.

A few proposals are marked by an asterisk to indicate that, in the opinion of the Regents, these should be held in abeyance for further study and discussion or that the Regents are opposed on the basis of total, statewide planning. This is not to say that the proposals may not have merit within the more limited context of possible solutions to regional or other special problems faced by the universities. The Regents' responsibility is to indicate what the Board thinks best to meet the needs and interests of all citizens and of the State as a whole.

The Regents have instructed the Commissioner and the staff to undertake in the near future joint explorations with the university concerned of every proposal on which a reservation has been indicated. Such explorations are needed to secure additional information and to consider alternative solutions.

Even a limited number of negative reactions to proposals developed by others often receive attention out of proportion to their relative importance. The Regents wish to emphasize, therefore, their enthusiastic approval of nearly all the proposals that appear in each of the Master Plans of the two public universities. These constitute large and fundamental contributions to the Regents Plan and are conservative projections of the role of public higher education in the years ahead. Everyone seriously interested in the future of higher education in the State is urged to read these two documents carefully and completely. 9/

The Regents express deep appreciation on the part of all citizens of the State for the hard work and creative thinking evident in the two Master Plans. The plans are evidence of the able, thoughtful, and deeply committed leadership which the State is fortunate to have in these two large sectors of higher education.

1. STATE UNIVERSITY MASTER PLAN, REVISED 1964

The summary of State University's 1964 Master Plan is reproduced below. The symbols (A, G, or *) just discussed, indicate the Regents' position on each numbered proposal. The page numbers in parentheses refer to the body of State University's Plan.

> The 1964 revision of the Master Plan focuses principally upon means of achieving identity, unity, and excellence throughout the University. Subject to approval of this revision of the Master Plan and availability of funds, the Trustees propose:

9/ Copies may be obtained by request addressed to the Office of Planning in Higher Education, State Education Department; Office of the Provost, State University of New York; or Dean of Studies, City University of New York.

For the Total University

A 1. That the enrollment goal for State University of New York be 160,500 full-time students in 1970 and 184,500 in 1974. (p. 14)

G 2. That the central staff of the University be enlarged to make possible greater educational leadership throughout the University. (p. 42)

G 3. That the Faculty Senate be strengthened and additional machinery be devised to encourage more faculty participation in the formulation of academic policy. (p. 43)

G 4. That scholarly research and literary and artistic endeavors be strongly encouraged and supported throughout the University. (p. 30)

G 5. That the in-service education of faculty members be strengthened through additional study and research grants, and by improvements in existing in-service development programs. (p. 22)

G 6. That intercampus conferences and other communications among faculty members of an academic discipline be given greater prominence. (p. 24)

G 7. That the University's publications program be strengthened, that appropriate scholarly journals be established, and that a State University Press eventually be established. (pp. 22, 31)

A 8. That the library resources of the University be increased and improved, and that the present holdings be doubled by 1970. (pp. 18-19)

A 9. That a system of interlibrary loans be established, making the University's total library resources easily available to all units of the University. (pp. 19, 31)

G 10. That an instrument exchange program be created to provide faculty members ready access to expensive and unusual equipment that may not be available locally. (p. 31)

G 11. That educational programs be developed cooperatively among units of the University to permit more effective use of the University's total resources. (p. 44)

G 12. That the programs for admissions, advisement, and placement in each unit be strengthened so that students are provided a broader view of their opportunities. (pp. 24, 44)

G 13. That the transfer of students among units for appropriate reasons be facilitated. (p. 24)

G 14. That special efforts be made to develop the talents of superior students, by using advanced placement and competency examinations as well as programs for tutorial and independent study. (p. 25)

G 15. That programs of continuing education be expanded, placing particular emphasis upon the retraining of displaced workers, providing refresher courses for professional workers, and meeting the cultural needs of our citizens. (p. 28)

G 16. That programs be devised to aid talented but disadvantaged persons. (pp. 27-8)

G 17. That increased use be made of new instructional devices, including films, programmed instruction, and television. (pp. 25-6)

* 18. That a University-wide television network be established. (pp. 28-9)

For the University's Parts

The Two-Year Colleges

A 19. That plans be prepared either to expand the existing community colleges in Erie, Nassau, and Suffolk Counties, or to establish new community colleges in these counties under boards which presently govern these institutions. (p. 34)

A 20. That community colleges be established in any or all of the following areas when study reveals that such action is desirable and feasible: Genesee County, Herkimer County, and the Elmira-Horseheads and Ithaca-Cortland regions. (p. 34)

* 21. That a branch of the Agricultural and Technical College at Canton be established at Saranac Lake to offer two-year programs in business and technical fields, including nursing. (p. 34-5)

* 22. That two-year programs in business and technical subjects be instituted at the State University College at Plattsburgh. (p. 35)

A 23. That, under normal circumstances, any new technical programs which would attract students from all areas of the State be established at one or more of the agricultural and technical colleges rather than at the community colleges. (p. 34)

A 24. That, for the foreseeable future, no existing two-year college be expanded into a four-year college. (p. 23)

G 25. That study of the financial and other needs of the community colleges be continued and, where appropriate, recommendations be made for legislative and budgetary action. (No direct reference in text.)

A 26. That a program of studies beyond the master's degree for the preparation of teachers for two-year colleges be established at a university center. (p. 33)

Colleges of Arts and Science

A 27. That new colleges of arts and science be established in Nassau and Westchester Counties. (p. 37)

The University Centers

G 28. That an institute composed of distinguished professors be established at each of the university centers. (pp. 21-33, 31)

A 29. That doctoral programs be developed in the traditional arts and sciences at the university centers; that, except in unusual circumstances, such programs be developed before doctoral work is developed in more specialized fields; that priorities be established for the development of doctoral programs at each center. (p. 38)

A 30. That the feasibility of establishing a graduate school of library science at a university center be explored. (p. 38)

A 31. That a School of Social Welfare be established at Albany. (p. 38)

A 32. That a Marine Sciences Research Center be established at Stony Brook. (p. 30)

The Specialized Colleges and Programs

A 33. That the faculty of the Graduate School of Public Affairs be expanded and the School's facilities improved. (p. 41)

G 34. That the specialized colleges, including contract colleges, not expand their programs of instruction and research into areas more properly assigned to the university centers. (p. 40)

G 35. That the functions and programs of the contract colleges and the relationship of these colleges to State University be re-examined. (p. 40)

A 36. That a School of Criminal Justice be established in Albany. (pp. 30,41)

G 37. That a Center for International Studies be established at Planting Fields, Long Island. (pp. 26-7)

The Medical Centers

A 38. That a new medical center be established on Long Island as part of the State University at Stony Brook. (pp. 39-40)

A 39. That studies be continued to determine the proper location for an additional medical center to be established during the 1970's (p. 40)

2. CITY UNIVERSITY MASTER PLAN, 1964

The format and style of presentation used in City University's Master Plan does not identify proposals and recommendations as distinguished from the text. However, statements are made in the text that declare intent and show the planned course of development at City University. The following excerpts summarize the main proposals. The Regents' position and the pages within the body of City University's 1964 Master Plan are recorded in the manner used in the review of State University's Master Plan.

Position on Free Tuition

* 1. We need no more statistics and no further surveys to make clear that society now functions through a great variety of developed talents. We feel sure that you will see in the next few years the depth of the importance of extending free tuition to the students in community colleges in this city, for it will enable us to reach new levels of college potential. We had made sure that the students in our two "college discovery" programs would not have to pay tuition--this, before free tuition was extended to all community college students. (p. 3)

Certainly City University's no-tuition policy is related to fiscal policy. It is one aspect of fiscal policy that the Governor and the Legislature have declared to be within the province of the Board of Higher Education, and the law passed in 1961 at the request of the Governor gives the Board that responsibility. (p. 4)

Plans for New Curriculums

G 2. Within the next four years, it is anticipated that the University will offer the master's degree in most or all of the recognized academic disciplines. Programs in Russian Area Studies and in Russian Language and Literature will be expanded. (p. 34)

A 3. The next four years should see the development of doctoral offerings in additional fields: within the next two years work leading to the Ph.D. is planned in business, education, physics, mathematics, political science, sociology, speech, and Romance Languages. (pp. 34-35)

G 4. The University will continue to assess its strengths and the needs of students and the community for either new or additional offerings in professional fields,such as nursing, optometry, public health, public welfare, library science, and city planning. We shall re-evaluate from time to time our present rather cautious attitude toward entering the fields of law and medicine. (p. 35)

G 5. The University anticipates interdisciplinary offerings and special programs at the graduate level bridging the fields of the sciences, the social sciences, and the humanities. The structure of the graduate program will be kept sufficiently flexible to accommodate emerging needs in these and other interdisciplinary areas. (p. 35)

A 6. The existing urban research activities at the colleges of City University should probably be expanded to form a full-fledged Urban Studies Institute, to support faculty and doctoral investigations on a University-wide basis in a number of fields in which the solution of serious problems which beset the metropolitan area will depend upon the results of basic research. (p. 35)

G 7. City University must prepare teachers who understand the problems of urban teaching and can face them ably and confidently; and it must provide the specialists in the improvement of reading, in guidance, and in other fields who are so desperately needed. (p. 36)

G 8. City University must provide the scholarly leadership in conducting the research and experimentation that are essential if we are to get at the roots of the problems of urban education today. (p. 36)

G 9. Existing programs of undergraduate teacher education appear to be meeting current needs effectively, and no new programs are anticipated in the next few years. Instead, it is expected that programs currently offered will be strengthened and some will be expanded. (p. 37)

G 10. The Senior Colleges have developed cooperative relationships with public schools in which the children are not specially selected, and where the school program is a part of the City school system. Each of the colleges has developed affiliated school relationships which provide valuable experiences in the undergraduate preparation of teachers. The success of this aspect of the program has been great, and it is expected that, at each college, this arrangement will be extended to include more schools, particularly at the secondary level. (p. 37)

A 11. Several new graduate programs for teachers are to be introduced during the 1964-1968 period. For example, City College is planning a program in vocational education. At Brooklyn College and at Queens College, graduate programs in the teaching of foreign languages are being developed. Programs in elementary education with specialization in art and in science are anticipated at Brooklyn College. Programs for the preparation of liberal arts graduates who wish to teach are being planned at Hunter College, Queens College and Brooklyn College, in addition to the program currently conducted by City College. (p. 38)

A 12. Since qualified guidance personnel are vitally needed in the schools, the colleges have expanded and will continue to expand their programs of guidance and school counseling. (p. 38)

A 13. New fields of specialization require new programs of preparation, some of which will be introduced in the immediate future: Hunter College, for example, is planning certificate programs in urban education and in educational technology. A certificate program in school psychology is being developed at Brooklyn College, and in special education at City College. Several programs to prepare specialists in curriculum and teaching are planned; in art, music, social studies, mathematics, and science at City College; in language arts, social studies and science at Hunter College; and in language arts, mathematics, and science at Queens College. (pp. 38-9)

A 14. There is at present a University committee planning a doctoral program with several specializations in such areas as educational psychology, educational administration, educational evaluation and research, and comparative and international education. (p. 39)

A 15. Except for a collegiate nursing program under consideration at Queens College, no entirely new curriculum is envisaged for the next quadrennium at any of the Senior Colleges, though all the existing curricula are under faculty scrutiny, and where necessary, are subject to revision. (p. 41)

G 16. There are procedures for exempting superior students from required courses, and for enrolling them in honors programs where they have an opportunity to engage in independent and advanced study. Other kinds of adjustments must be made for the student who, in one subject or another, is not quite up to the pace set by the abler students. (p. 42)

A 17. To meet the growing needs in the health areas, it is contemplated that programs in nursing and various medical technologies and therapies will be required at Staten Island Community College. (p. 43)

A 18. The Bronx Community College is planning an extension of its curriculum in the health fields. (p. 44)

A 19. In cooperation with the Departments of Social Studies and Health Education, curricula in the fields of recreational work, camping and in child care are being developed at Bronx Community College. (p. 44)

A 20. Kingsborough Community College plans a new curriculum in business machine technology. (p. 44)

A 21. Borough of Manhattan Community College plans new curricula in advertising and public relations and in business data processing. (p. 44)

A 22. The new Borough of Manhattan Community College will institute a cooperative education (work-study) program as an integral part of its educational offering. (p. 44)

G 23. To the end that undesirable duplication may be avoided, studies of new community college curricula will in every case include full consultation with officers of State University, and with local leaders of business, of industry, and of government agencies. (p. 47)

G 24. With respect to the College Discovery Program, experimental programs for both high school graduates and for high school juniors are proposed. (p. 48)

Plans for New Facilities

A 25. If, as we expect, enrollment in the doctoral programs will triple by 1968, additional classroom, seminar, library and research facilities will have to be expanded both at the colleges and centrally. The present meager office facilities for faculty must be brought up to standard. (p. 54)

G 26. Closed-circuit or special-channel television is under study by a University committee with the purpose of making maximum use of facilities. (p. 54)

G 27. The University's Council of Librarians is studying ways to use existing separate libraries for the support of graduate programs. The conversion of existing libraries into libraries adequate for a distinguished graduate school will require a substantial investment. (p. 54)

G 28. In addition to conventional research facilities, the University plans to include the establishment of a number of research institutes requiring the acquisition of land, buildings, and equipment. A long-range plan for buildings and equipment will be developed in connection with the annual revisions of this Master Plan. (p. 55)

G 29. A conclusive answer to the question whether a University Press should be established will have to await a future revision of this Master Plan. (p. 55)

A 30. Conference facilities, now in great shortage, must also be supplemented. (p. 55)

A 31. Plans must go ahead at once to acquire necessary land in parts of the City suitable to the University's requirements. Steps have been taken to seek Federal loan funds for the construction of a dormitory for graduate students and young faculty. In the meantime, the University is using temporary facilities at the Bronx campus of New York University. (p. 55)

A 32. Additional and new facilities will be required to increase the scope and effectiveness of the teacher education programs, especially in connection with newer techniques and methods... for example, the need for closed-circuit television set-ups at Queens College and at City College in conjunction with their affiliated schools and the provision at Hunter College of a demonstration school for the teaching of the physically handicapped. (p. 56)

A 33. During 1964-1968 new construction amounting to $239,328,670 to accommodate an additional 28,800 students is scheduled. (p. 60)

Plans for Staff Recruitment

A 34. In order to attract senior members of other institutions to City University faculty, an arrangement should be established whereby they may continue their Teacher's Insurance and Annuity Association contract, with the City contributing to TIAA what it normally contributes to the New York City Retirement System. (p. 61)

A 35. In the near future, the provisions of the Teacher's Retirement System, insofar as they apply to the staff of the University, should be modified to meet the standards of the best institutions of higher education in the country. (p. 62)

G 36. Not only must the regular salary schedule be as high as the best in the nation, but there must be enough flexibility to appoint especially distinguished professors at salaries outside the regular schedule. (p. 63)

G 37. The University must accept a major responsibility for providing its graduate faculty members with the facilities required to carry on research. (p. 63)

A 38. The problem of staff recruitment for community colleges will become especially critical as a result of substantially different salary schedules in two-year as compared with four-year colleges. The Board of Higher Education in the 1962 Long-Range Plan (p. 18, Sec. 14) recommends that community college salary scales start at the same point as senior college scales and rise with the same increments for the same bylaw qualifications and responsibilities. Major steps should be taken in the next five years to achieve the above recommendation. (p. 64)

A 39. It is essential to remove the discrepancies in hourly rates of pay as between those teaching in community college evening sessions, and those dealing with similar levels of instruction in the Schools of General Studies in four-year colleges. (p. 64)

A 40. The addition of full-time positions in the Schools of General Studies must be accelerated; in the meantime, as the competition for able instructors becomes more acute, the rates of pay for part-time personnel assigned to the teaching of one or two courses must be revised upward. (p. 64)

Student Enrollment Policies

G 41. Enrollment policies in the graduate program will be developed along the following lines in the next four years:

a. Doctoral programs will be designed primarily for full-time students.

b. Financial aid to graduate students must be greatly augmented.

c. Pressure for admission of graduate students is expected to mount. The University must be able to attract able married women back to academic life. (p. 65)

A 42. The University plans to keep its graduate tuition at a moderate level and in line with that of other public institutions. An appropriate tuition differential for out-of-State students will be given consideration as soon as an appreciable number of out-of-State students indicate a desire to study at City University. (p. 65)

G 43. Increasing attention must be paid in the years ahead to the accommodation of foreign students. With the United Nations and other international centers attracting hundreds of foreign families to New York City, it is appropriate that the University give thought in its planning to the advanced education of foreign students, and that such planning take into account the activities in this area of its sister universities in New York City. (p. 66)

G 44. It shall be the policy of the Board of Higher Education and of the University authorities to maintain a strenuous and constant effort to secure sufficient financial support both for construction and for operating costs to permit the admission of all applicants who possess the requirements defined below. (p. 66-67)

i. Senior Colleges. Graduates of academic high schools who are in the top quarter of the entire body of graduates of all high schools, public and non-public, of every type, are considered, on the basis of our experience over the years, to have the ability to achieve a baccalaureate degree. This top quarter currently comprises graduates with grade averages of 82 per cent or above in high school curriculums leading to academic or commercial diplomas.

For the Schools of General Studies conducted by the Senior Colleges, significantly higher standards of admission than those heretofore maintained by those schools are planned and will soon be put into operation.

ii. Community Colleges. In the transfer programs, those who are in the top half of the entire body of graduates of all high schools, public and non-public. This top half currently comprises graduates with averages of 75 per cent or above in curriculums leading to academic, commercial, or technical high school diplomas.

In the career programs, the criterion of minimum ability consists in both the acquisition of a high school diploma and the attainment of a satisfactory score in an examination or examinations appropriate to the program for which the student is an applicant.

A 45. The State Education Department, in consultation with the colleges and schools, should study the question of vocational education and consider the authorization of the use of particular curricular titles for the different levels of instruction, so as to help avoid confusion in the minds of the public. (p. 67)

Estimates of Potential Student Enrollments

A 46. City University proposes in 1968 to accommodate between approximately 52 and 59 thousand full-time students in four-year colleges; by 1970, they plan to accommodate between 56 and 65 thousand. These expectations are in general accord with those projected by the Office of Planning in Higher Education, which anticipates approximately 56,500 students in 1968 and 61,300 in 1970 for City University four-year colleges. (p. 68-71)

A 47. Enrollment expectations in community colleges are set in City University's plan at approximately 16,700 in 1968 and 20,500 in 1970. These are somewhat higher than those projected by the State Education Department's Office of Planning in Higher Education, which indicate approximately 14,000 in 1968 and 17,000 in 1970. (pp. 68-71)

A 48. Studies have established the existence of a pressing need for a publicly-supported senior college on Staten Island. If plans for such a college are put in motion without delay, a target date of September 1969 for its opening is not unreasonable. These plans are concerned solely with the establishment of a separate senior college on Staten Island and do not contemplate any connection or overlap with the existing Staten Island Community College which is slated to expand in its own field as the needs for it develop. (p. 79)

G 49. Part of the enrollment pressure on the senior colleges arises from transfers from the community colleges and from other advanced standing admissions, and more and more students will take these routes to a senior college in the future. Serious consideration is being given to establishing one of the new colleges with a very small freshman and sophomore class or with none at all. (p. 80)

G 50. Crucial to the development in the 1968-72 quadrennium of five of the community colleges of City University (Staten Island, Bronx, Queensborough, Kingsborough, and Borough of Manhattan) are two factors: the transfer to these colleges, as soon as their capacity warrants it, of the A.A. and A.A.S. programs now (1964) being conducted in the Schools of General Studies of the Senior Colleges, and the implementation of the plans announced by the City of New York to place the community colleges on a tuition-free basis. When the latter step is taken, the channeling of students to the senior or community college on the basis of ability and academic need will be greatly facilitated. (p. 80)

A 51. As soon as the capacity of Staten Island, Bronx, Queensborough, Kingsborough and Borough of Manhattan Community Colleges warrants it, and the community colleges become tuition-free, A.A. and A.A.S. programs nor (1964) being conducted in the Schools of General Studies of the Senior Colleges will be transferred to these five Community Colleges. (p. 80)

A 52. As more community college graduates transfer to four-year colleges, upper division course work will grow in the Schools of General Studies. At the same time, there will probably be fewer freshmen and sophomores in the Schools of General Studies, with a corresponding growth in the number of part-time students in the evening divisions of the Community Colleges. (pp.80-81)

A 53. On June 15, 1964, the Board of Higher Education approved in principle the establishment of a police college as a four-year college, but only subject to the provision "that such college be and remain under the sole and complete jurisdiction of the Board of Higher Education of the City of New York." It is planned to call the new institution "The College of Police Science." (Attachment to letter from Chairman of Board of Higher Education to Board of Regents, November 19, 1964, offering amendments to 1964 Master Plan as submitted on June 3, 1964)

A 54. Hunter College School of Social Work. Development of a doctoral program in social work before 1970 is foreseen as a result of expansion of the School during the present quadrennium. (Attachment to letter from Chairman of Board of Higher Education to Board of Regents, November 19, 1964, offering amendments to 1964 Master Plan as submitted on June 3, 1964)

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3. PLANNING BY PRIVATELY CONTROLLED COLLEGES AND UNIVERSITIES

Although detailed plans of privately controlled institutions were not specifically required by the 1961 statute, the Board of Regents was directed to "evaluate all available information with respect to plans and facilities of private institutions." Through the use of questionnaires and conferences with college and university officials, information was obtained on matters of particular importance to statewide planning. Long-range plans projected by some of the privately controlled institutions were also made available on a voluntary basis.

Since the result was not a single plan but a collection of data and plans reported by many different institutions, Regents' comments on the contributions of the plans of the private institutions towards meeting the State's needs in higher education are made in Part V in connection with specific topics.

One general observation that can be made on planning among the privately controlled institutions of higher education is that present practice varies widely and is, in general, inadequate for the years ahead. Some private institutions have well-developed and detailed plans looking five, ten, or even more years into the future. Others have no formally stated plans beyond a year or two ahead.

Another general observation is that the privately controlled colleges are drawing increasingly on the fund of information collected by the State Education Department in preparation for this report. They are finding useful for their own planning such data as the studies on enrollment trends, residence and migration of college students, faculty supply and demand, and per-student costs. The data in all of these studies included information on private colleges and were analyzed on a statewide basis. In addition, some were analyzed on a regional basis. The Regents will propose that this program of special studies and research to assist the continuous planning effort of the State be enlarged.

PART V

SYTHESIS: THE REGENTS PLAN, 1964

This part considers the extent to which the present plans of institutions of higher education will meet the State's needs in a number of broad areas and presents additional proposals from the Regents. Each major section will (1) provide information on the plans of the privately controlled colleges, (2) refer to related proposals advanced in the Master Plans of the two public universities, with comments and proposals from the Regents.

1. TO MEET THE NEEDS OF INDIVIDUALS

One of the primary concerns in State planning throughout the nation is to provide enough places for education beyond the high school. Will there be enough to provide for every able and interested person? Will they be there when needed? Will they be accessible to all?

Furthermore, will the places be the right kind? Neither students nor college places are homogeneous; students have different wants and college places have different characteristics. While the first requisite is enough places across the State to serve the needs of students, a really suitable plan to meet the State's needs in higher education has to take into consideration more than numbers of people and places. It must give attention to the kind, location, cost, and other characteristics of places and the preferences, wants, and needs of students.

Still another fact must be appreciated in a statewide plan for places. Some excess of places is necessary if individual choice is to be respected and reasonable allowance made for proper "fit" of students to programs in college. Practical problems prohibit higher educational institutions from operating at a level of total utilization of plant or faculty. Moreover, geographic accessibility, type of control, varying costs, varying programs, and other factors, when seen against choices desired by students, make a total filling of college places an unrealistic expectation. As a general rule, an excess of about ten per cent of places over full-time students seeking enrollment in college may be considered reasonable and necessary.

Plans of the Institutions to Meet Enrollment Demands Statewide

The estimated statewide enrollment in the different classifications of institutions is shown in Table 4: as of 1970, an over-all statewide enrollment of about 431,000 full-time undergraduate and graduate students, with approximately 208,000 enrolled in privately controlled colleges, 160,000 in State University including the community colleges, and 63,000 in City University. These are the numbers of students expected to be accommodated by each group of institutions. The enrollments are based on the statewide estimates of "probable college enrollment" reported in Part II.

Table 4
TOTAL FULL-TIME ENROLLMENT (GRADUATE AND UNDERGRADUATE) IN NEW YORK STATE INSTITUTIONS
ACTUAL--1964; ESTIMATED--1965-1970

(BASED ON AVERAGE TREND PROJECTION OF TOTAL)
(NUMBERS IN THOUSANDS)

	1964		1965		1966		1967		1968		1969		1970		Increase 1964-1970	
	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Four Year Units	85.2	255.9	84.2	278.7	83.3	299.9	82.3	316.9	81.6	319.1	80.9	332.5	80.0	344.8	34.7	88.9
Private	54.2	162.9	52.8	174.8	51.4	185.0	50.0	192.5	48.9	191.2	47.8	196.5	46.3	199.6	22.5	36.7
Public	31.0	93.0	31.4	103.9	31.9	114.9	32.3	124.4	32.7	127.9	33.1	136.0	33.7	145.2	56.1	52.2
CUNY	13.5	40.5	13.6	45.0	13.8	49.7	14.0	53.9	14.2	55.5	14.4	59.2	14.7	63.4	56.5	22.9
SUNY	17.5	52.6	17.8	58.9	18.1	65.2	18.3	70.5	18.5	72.4	18.7	76.8	19.0	81.9	55.7	29.3
Two Year Units	14.7	44.2	15.8	52.3	16.7	60.1	17.7	68.1	18.4	71.9	19.1	78.5	20.0	86.2	95.0	42.0
Private	1.46	4.4	1.5	5.0	1.5	5.4	1.6	6.2	1.7	6.6	1.8	7.4	1.9	8.2	86.4	3.8
Public	13.3	39.8	14.3	47.3	15.2	54.7	16.1	61.9	16.7	65.3	17.3	71.1	18.1	78.0	96.0	38.2
Ag. & Tech.	2.6	7.8	2.7	8.9	2.8	10.1	2.8	10.7	2.8	10.9	2.8	11.5	2.8	12.1	55.1	4.3
Comm. Coll.	10.7	32.0	11.6	38.4	12.4	44.6	13.3	51.2	13.9	54.3	14.5	59.6	15.3	65.9	125.9	40.3
New York City	3.1	9.2	3.5	11.6	3.7	13.3	3.9	15.0	4.1	16.0	4.3	17.7	4.5	19.4	110.8	10.2
Other	7.6	22.8	8.1	26.8	8.7	31.3	9.4	36.2	9.8	38.3	10.2	41.9	10.8	46.5	103.9	23.7
State Total	100.0	300.1	100.0	331.0	100.0	360.0	100.0	385.0	100.0	391.0	100.0	411.0	100.0	431.0	43.6	130.9
Private	55.7	167.3	54.3	179.7	52.9	190.4	51.6	198.7	50.6	197.8	49.6	203.9	48.2	207.7	24.1	40.4
Public	44.2	132.8	45.7	151.3	47.1	169.6	48.4	186.3	49.4	193.2	50.4	207.1	51.8	223.3	68.1	90.5
CUNY	13.5	40.5	13.6	45.0	13.8	49.7	14.0	53.9	14.2	55.5	14.4	59.2	14.7	63.4	56.5	22.9
SUNY	30.7	92.3	32.1	106.3	33.3	119.9	34.4	132.4	35.2	137.7	36.0	147.9	37.1	159.9	73.2	67.6

Institutional Plans

Projections of institutional ability to accommodate students as reported in the Master Plans of State University and City University and as determined by the State Education Department for the privately controlled colleges collectively indicate that, if present plans to expand facilities are completed on schedule there will be places enough to take care of all full-time students who seek admission. It should be noted, however, that estimates of probable enrollment for the latter part of the decade when compared to estimates of places available in the colleges and universities of New York State show that the margin of slack between enrollments and places is expected to be reduced significantly and might be eliminated entirely. To preserve a desirable margin of flexibility between enrollments and places toward the end of the decade, therefore, will require a better utilization of facilities as well as maintenance of the planned schedule of expansion.

Of significance, also, is the observation that the combined and coordinated efforts of all of the different segments of higher education will be required for an orderly accomplishment of the enrollment objectives stated. A failure of one group of institutions would place an additional and unplanned burden on the others. Conversely, accommodation of a significantly larger number of students than shown in Table 4 for a given group of institutions by actions unannounced in plans thus far reported to the Regents would leave the other groups of institutions with an undue number of unfilled places. In the matter of enrollment planning, as in all other aspects of higher educational operations, New York State colleges and universities must act as a coordinated system.

Among the privately controlled institutions the response of individual colleges to the pressures of larger numbers of applicants varies greatly. Some plan no increase in size in the foreseeable future, preferring to use their resources to meet the increasing costs of operation and to maintain or improve the quality of their offerings. Some feel that a particular size is important to the kind of educational opportunity they provide. Others wish to become more selective in admissions. In general, however, it would appear that most colleges are responding to or anticipating larger enrollments. Even the concept of the ideal size of the so-called "small" college, which has always varied greatly from campus to campus, is changing even more as case studies are completed on the economics of operations and as pressures of various kinds develop, such as from alumni or from the particular constituency to which some are committed.

Most institutions, however, expect to accommodate more students in existing programs. Some also intend to offer a greater variety of programs, in certain cases at a higher level. These decisions often appear to have been made without careful planning. In spite of urging in recent years by authorities in higher education there is still a great lack of long-range planning. Because of this, along with failures to make critical decisions on the precise nature of the role they expect to play, it is impossible to present a State summary of the plans of privately controlled institutions in any great detail.

On a questionnaire from the State Education Department, 20 private institutions now classified as four-year colleges report that they are planning to offer bachelor's degrees in new fields by 1968. These institutions are spread throughout nine of the 12 planning areas shown in Figure 1, with only the Mid-Hudson, Northern, and Syracuse areas lacking planned new baccalaureate programs. These new programs collectively are expected to accommodate 7,850 full-time students and 1,900 part-time students. This new capacity is reported to be approximately 40 per cent in liberal arts, 25 per cent in education, 15 per cent in engineering, slightly less than 15 per cent in science and mathematics, and the remaining small percentage in the fields of religion, psychology, nursing, language and business. In addition, three institutions that in 1964 offered only two-year programs are planning to extend offerings to the four-year level. They are located in Buffalo, Syracuse,and Rockland-Westchester areas. Collectively they plan to accommodate over 1,000 full-time students in baccalaureate programs by 1968.

Of special interest to the State as a whole are the plans of State University to establish new colleges of arts and science in Nassau and Westchester counties and to prepare plans either to expand existing community colleges in Erie, Nassau and Suffolk Counties or to establish new community colleges in these counties. Regents endorsement of these plans is consistent with the over-all need for more college opportunity in the State and a general expansion of facilities and programs to meet the need. One type of expansion, however, which is strongly opposed by the Trustees of State University, the Board of Higher Education of New York City, and the Regents is the conversion of two-year colleges to four-year status. Adherence to this policy of not expanding two-year institutions into four-year institutions is of critical importance to state planning.

City University's 1964 Master Plan proposes to accommodate in its four-year units the expected 63,000 or more students by 1970 through the expansion of existing programs, the addition of new programs, particularly at the graduate level, and the establishment of a new four-year college on Staten Island.

Regents' Comment and Further Proposals

The statewide enrollment burden will continue to fall heavily on the privately controlled, four-year institutions, with a total full-time graduate and undergraduate enrollment of nearly 175,000 estimated for 1965, over 191,000 by 1968, and almost 200,000 by 1970. The surge in enrollment will take effect first in the undergraduate colleges as the larger numbers of high school graduates seek admission, are enrolled, and in larger proportions stay in college for longer periods of time. Thus the initial concern is for sufficient undergraduate college capacity. The best data available indicate that full-time undergraduate enrollment in four-year private institutions will rise to about 142,000 in 1965 and 159,000 in 1970. This will be a more rapid rise than in facilities and will force a much more complete use of them. Computations indicate that whereas over 15 per cent of the undergraduate places in privately controlled four-year institutions were not in use in 1962, less than five per cent will be unused in 1965 and for the rest of the decade. Therefore, the degree of flexibility that is needed in any system of higher education will not be present unless the rise toward estimated capacity is offset by more efficient utilization of facilities.

Plans to Meet In-State Regional Demand for Enrollment

Additional understanding of needs in New York State is to be obtained from a comparison of student residences and the places students go to obtain post-secondary education. Until the fall of 1963, specific information on the patterns of mobility demonstrated by students of New York State were lacking. Fortunately, it was possible to coordinate a study by the State Education Department of in-state migration with a study of interstate migration being conducted simultaneously by the Federal Office of Education.

The results of these inquiries raise many questions of educational importance. The data in Table 22 (Appendix G) show that New York has a total out-migration of 92,000 students, partially offset by an in-migration of about 56,000, thus leaving net out-migration of over 36,000 students. These facts raise questions concerning reasons why so large a number of the State's citizens seek educational opportunity outside of their home state, and whether changes in educational policies and practices are needed. Similar questions of educational policy and operations are raised by the migration of college students as summarized in Tables 23 and 24. These tables show the over-all pattern of migration by full-time undergraduate students and by first-time freshmen, respectively. Beyond this, still more detail is available by consulting Tables 25 and 26 which show, respectively, in- and out-migration by economic area within New York State, and finally the origin and destination of all interstate migration by full-time undergraduate students as of the fall of 1963. Some of the major conclusions which may be reached through a careful study of these data are:

(a) With few exceptions, private four-year institutions, contrary to the popular belief that they serve students from a wide geographic range, have among their student bodies a highly "local" population both in terms of interstate and intrastate migration patterns. Over 75 per cent of undergraduate students in New York institutions under private control are residents of the State. Of these, half are residents of the county in which the institution attended is located.

(b) The four-year units of City University serve New York City residents almost exclusively.

(c) The university centers and university colleges of State University draw virtually all of their students from New York State and tend to serve the State as a whole rather than the area more immediately surrounding a given campus.

(d) The contract colleges of State University serve a broader national and state population than do the other four-year units of State University.

(e) In both interstate and intrastate migration, private two-year institutions serve a population much less "local" than the public two-year colleges, and parallel closely the range of drawing power shown by the private four-year institutions.

(f) Public two-year institutions serve New York State residents almost exclusively, with the agricultural and technical colleges serving a statewide population and community colleges serving a much more localized area.

(g) The Nassau-Suffolk economic area is seen to have the State's most outstanding net migration figure, a minus 16,000. In other words, a net of 16,000 undergraduate students leave these two counties to attend college elsewhere in the State.

(h) New York City has the second largest out-migration, a total over 13,000, but this is offset by an even larger in-migration from the rest of the State.

(i) The Rockland-Westchester economic area has the second largest net out-migration,totaling in 1963 almost 6,000 students.

(j) Enrollment originating in New York City and the Nassau-Suffolk region supplies the second largest number of students to all economic areas except Buffalo, Mohawk Valley, and Rochester.

These comparisons indicate regions of high and low disparity between enrollment originated and places available for undergraduate students. Lack of places in a given region makes it necessary for students to migrate out of State or other areas of the State regardless of their interests or financial condition. For purposes of statewide planning, these comparisons quickly show the regions in which increased capacity is most or least needed.

Many persons will hold that a student's migration from home frequently stimulates his personal and social development. But the possible advantages must be assessed against the added expense of travel and the increased cost to both student and institution for provision of board, room, and related special services. This raises the question whether the additional costs should be borne entirely by the student or met in part by the institution.

The present pattern of intrastate student migration will change gradually as proposals to establish new colleges and expand the enrollment of existing colleges are brought to fruition. As soon as the proposed new four-year institutions in Nassau and Westchester Counties are established by State University, the new institutions of baccalaureate level are founded by

City University, and the proposed expansion of community colleges has been accomplished, a better balance between geographic place of residence and accessibility of places for study should appear.

The Regents:

(1) Set as the goal for 1970 an over-all statewide enrollment of approximately 431,000 full-time undergraduate and graduate students. Within this figure the private colleges are expected to enroll 208,000; State University and the public community colleges together, be looked upon to enroll about 160,000; and City University, approximately 63,000 students. (The figures for the two public universities were derived independently of those reported as target figures set forth in their 1964 Master Plans. The order of magnitude of the enrollments projected, however, agrees closely.)

(2) Recommend that all institutions which have not done so already make plans for more efficient utilization of facilities and faculties. High priority to such plans is essential to the achievement of statewide enrollment goals and to higher quality performance.

(3) Will prepare and publish annual revisions and extensions of projections of enrollment for all categories of students and types of institutions to assist future planning by State University, City University, and the private institutions.

(4) Recommend that State University of New York examine its policies on student admission and the provision of institutional facilities, especially dormitories, in the light of currently available data on geographic mobility of students. Announcement of a definite policy by State University is necessary for regional planning on the part of other colleges and universities.

Eliminating Barriers to College Attendance

To meet fully the higher educational needs of individuals, more is required than the provision of an aggregate number of student places on a statewide or regional basis. Other barriers to college attendance which must be broken include those of high cost, program inaccessibility, and excessively difficult transition from level to level in post-high-school education for the student who seeks to utilize the services of two or more institutions.

High cost is a major barrier to college attendance, and costs continue to rise. The median tuition charges of a selected group of liberal arts colleges in New York State rose from $1,100 in 1960 to $1,250 in 1962, and $1,400 in 1964. The data shown in Table 5 and Figure 11 indicate that tuition costs are rising about $100 a year for the State and for most of the regions.

Table 5

Undergraduate Tuition of the Private, Four-Year, Nondenominational Collegiate Institutions in New York State, Liberal Arts Program*

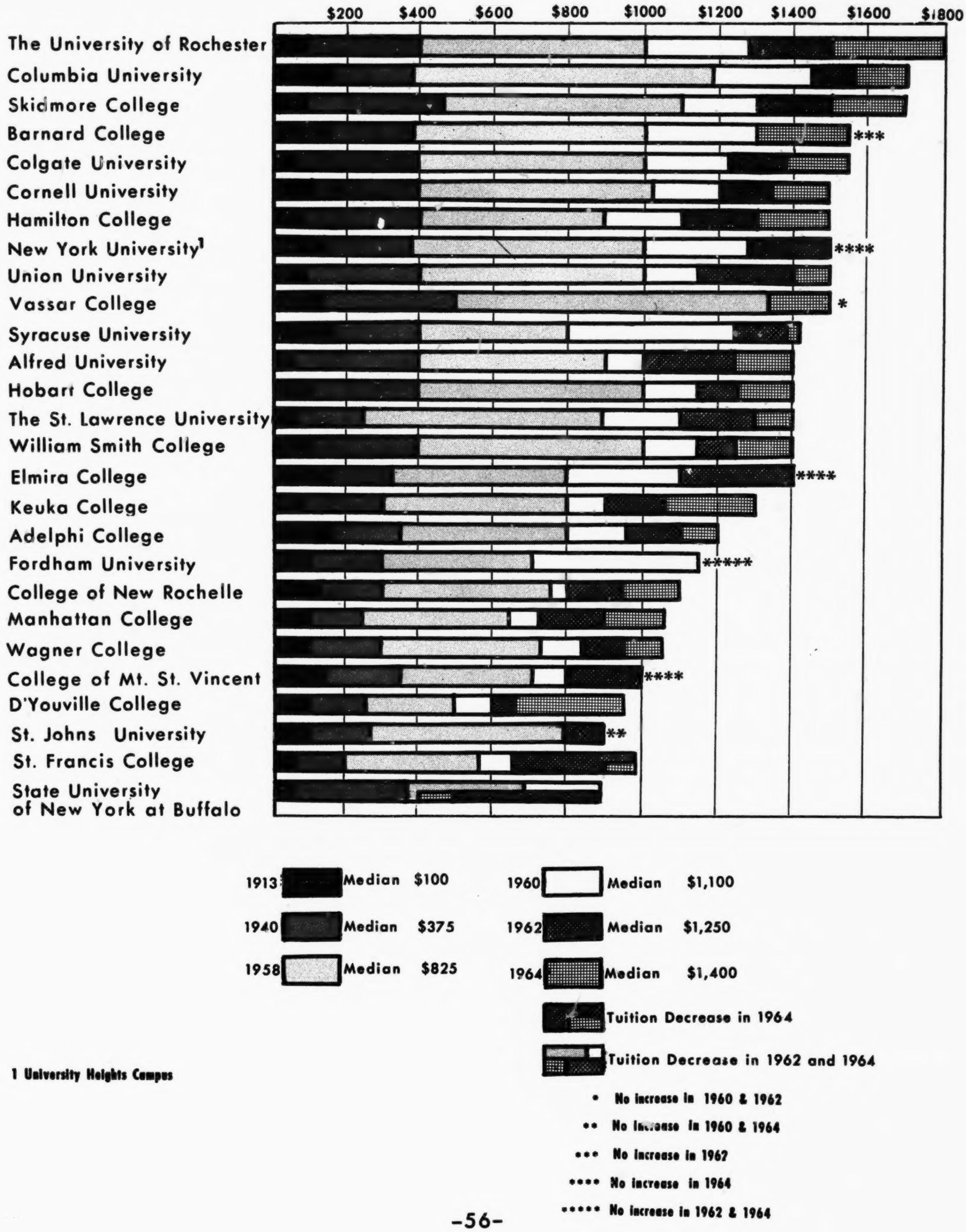
Economic Area	1959-60	1962-63	1963-64	1964-65
Binghamton				
None				
Buffalo				
University of Buffalo	$ 780	No longer applicable		
Capital District				
Rensselaer Polytechnic Institute	1,300	$1,600	$1,600	$1,800
Russell Sage College	900	900	1,200	1,200
Skidmore College	1,100	1,500	1,500	1,700
Union University	1,050	1,400	1,400	1,500
Elmira				
Alfred University	961	1,236	1,300	1,400
Cornell University	1,200	1,340	1,400	1,500
Elmira College	1,100	1,400	1,400	1,400
Ithaca College	850	1,200	1,300	1,550
Mid-Hudson				
Bard College	1,680	1,780	1,780	1,930
Vassar College	1,325	1,325	1,500	1,500
New York				
Adelphi University	800	1,110	1,200	1,200
Columbia University				
Barnard College	1,080	1,320	1,550	1,550
Columbia College	1,100	1,575	1,710	1,710
Program in the Arts	1,100	1,300	1,500	1,500
Teachers College	1,184	1,280	1,350	1,350
Finch College	1,600	1,850	2,000	2,150
Hofstra University	930	1,085	1,200	1,200
Long Island University				
Brooklyn Center	800	1,120	1,350	1,450
C. W. Post College	864	1,120	1,200	1,280
New School for Social Research	960	1,120	1,120	1,200
New York Institute of Technology	648	900	900	900
New York University				
University Heights	1,120	1,440	1,440	1,500
Washington Square	1,120	1,440	1,440	1,500

Table 5 (Continued)

Economic Area	1959-60	1962-63	1963-64	1964-65
New York (continued)				
Pace College	$ 800	$ 900	$ 900	$1,100
Pratt Institute	800	1,200	1,200	1,300
Sarah Lawrence College	1,820	2,020	2,020	2,200
Mohawk Valley				
Hamilton College	1,100	1,300	1,300	1,500
Utica College of Syracuse University	800	900	1,000	1,000
Northern				
(The) St. Lawrence University	1,100	1,300	1,400	1,400
Thomas S. Clarkson Memorial College of Technology	725	1,300	1,500	1,500
Rochester				
Rochester Institute of Technology	750	975	975	1,125
(The) University of Rochester	1,150	1,500	1,500	1,800
Syracuse				
Colgate University	1,225	1,375	1,550	1,550
Syracuse University	1,100	1,370	1,410	1,410
Wells College	1,275	1,450	1,450	1,650
Total Number of Institutions	36	35	35	34
Median Tuition	$1,100	$1,300	$1,400	$1,500

*Tuition for colleges that charge their tuition by dollars per credit hour is computed on the basis of thirty semester-hour year.

Figure 11
Tuition in Selected Liberal Arts Colleges
1913 - 1964



1 University Heights Campus

College attendance is strongly correlated with financial ability to meet the costs incurred. In Table 6 it is shown that the median per capita income in those counties in which college attendance is highest is almost $450 higher than in those counties in which college attendance is lowest. The other comparison in this same table reflects economic considerations also, for another important element in the cost of attending college is the cost of living away from home. The counties with the highest college-going rate not only have a higher per capita income than the State as a whole, and a much higher income than counties with the lowest college-going rates, but also have more colleges within their boundaries, making higher education more accessible to their residents than to residents of counties with low college-going rates.

Students and their parents have been helped to carry the financial burden of post-secondary education through such programs as Regents Scholarships and Fellowships, Scholar Incentive Awards, State University Scholarships, low tuition in public higher education, and guaranteed loans through the Higher Education Assistance Corporation. Regrettably, these contributions by the taxpayer to the student financial aid programs are seldom included and frequently not even mentioned by persons outside of New York when they compile data on public expenditures for higher education by the various states. This assistance in 1964-1965 amounted to over $62 million.

Inaccessibility as a result of geography has been touched upon above in connection with migration. Inaccessibility also results from the lack of suitable programs, suitable admission standards, and suitable counseling and placement. Elimination of the barriers to initial entry into college is only part of the job that needs to be accomplished if full opportunity in higher education is to be provided. Transfer procedures must be given special attention for those students wishing to transfer from two-year to four-year colleges without hindrance to their educational objectives. A special category of scholarships available to students who have demonstrated superior promise for college study while attending community or junior colleges would be both helpful and appropriate. This will be of increasing importance as enrollments rise in community colleges, and these institutions are given a more important place in the State's total program of higher education. Table 7 shows that at the present time public and private institutions are accepting about equal numbers of juniors as transfers. The significant point is that while public institutions report very little capacity to accommodate more transfer students, the privately controlled institutions indicate capacility of handling more than twice as many as they actually received.

Institutional Plans

Ample evidence exists to show that on the whole the private colleges taken as a group are exerting strong efforts to keep the costs to the student as low as possible. As will be shown in Part VI in more detail, there has been no significant increase over the past five years in the proportion of current operating expenses financed by tuition and fees charged to students. In other words, private colleges and universities have been able to meet rising costs of operation during the recent past by

Table 6

COLLEGE-GOING RATES, PER CAPITA PERSONAL INCOME, AND NUMBER OF INSTITUTIONS IN NEW YORK STATE COUNTIES WITH HIGHEST AND LOWEST COLLEGE-GOING RATES, 1963

College-going rate	Per Capita Personal Income	Number of Institutions
	Highest 1/4 of all counties in c-g rate 1/	
Range 59-73% Median 64.5%	Range $1,435-3,648 Median $2,255	Range 0-16 Median 2.5 2/
	State (all counties)	
Range 43-73% Median 58%	Range $1,435-3,648 Median $1,919	Range 0-59 Median 1
	Lowest 1/4 of all counties in c-g rate 1/	
Range 43-51% Median 49%	Range $1,460-2,560 Median $1,813	Range 0-14 Median 0 3/

1/ New York City included as one county. Highest 1/4 covers 14 counties but the lowest 1/4 includes 17 counties because of identical college-going rates at the upper limit of the group.

2/ 59 institutions in 14 counties.

3/ 27 institutions in 17 counties, of which 9 have no institutions and 5 have 1.

The 16 counties with no institutions have a median college-going rate of 51 per cent. The 20 counties with the greatest number of institutions (3 to 59) have a college-going rate of 58 per cent.

Table 7

TRANSFER-ADMISSIONS TO JUNIOR CLASS FULL-TIME DAY PROGRAMS, FALL, 1963

LANNING AREA	NUMBER OF JUNIOR TRANSFERS			ADDITIONAL PLACES AVAILABLE			
	Private	Public	Total		Private	Public	Total
Binghamton	18	41	59		30	0	30
Buffalo	110	218	328		336	0	336
Capital District	83	113	196		580	0	580
Elmira	119	31	150		116	50	166
Long Island	199	0	199		40	0	40
Mid-Hudson	36	72	108		135	0	135
Mohawk Valley	0	0	0		0	0	0
New York Metropolitan	672	783	1,455		1,545	0	1,545
Northern	25	25	50		115	0	115
Rochester	221	41	262		387	0	387
Rockland-Westchester	91	0	91		130	0	130
Syracuse	33	90	123		76	40	116
Total	1,607	1,414	3,021		3,490	90	3,580

acquiring increased funds from other sources (such as governmental grants, endowment, private foundations, annual alumni contributions, and gifts) proportionate to increases in direct charges to the student.

Plans reported by private colleges indicate every intention to continue this pattern of financing as long as possible and still maintain desirable levels of quality. Nonetheless, they recognize that the pattern of continuing rise in direct costs to the student (in dollar amounts, even if not in proportion to costs supported) requires critical examination. To assist students to meet costs of attendance, the colleges are continually expanding financial aid programs. These include more loans and scholarships, work opportunities for some students, and other related programs.

It is clear that State University recognizes the existence of barriers to education and the desirability of their removal. A policy of strengthening existing programs and devising new programs to aid talented but disadvantaged persons, to facilitate transfer of students among units, and to improve admissions, advisement, and placement is stressed in the Master Plan. These areas will become increasingly critical as social change proceeds and as State University plays an increasingly larger role in higher education in the State.

The City University Master Plan contemplates changes in the undergraduate "student-mix:" a higher proportion of juniors and seniors in the senior colleges, more transfers from community colleges, especially to the schools of general studies, and more part-time students in the evening divisions of community colleges. Thus, the plan implicitly assumes that the transfer process will not become the block to student progress which it often is in other situations.

The existing lack of agreement on tuition policy still results in unequal treatment for students attending different publicly supported institutions in the State. Steps to remove this unequal treatment were not proposed by City University in its 1964 Master Plan. The plan, in fact, extended to the five community colleges in New York City under the Board of Higher Education the policy of not charging tuition which is in effect in the regular four-year undergraduate programs. Tuition is charged, however, for graduate programs and in the schools of general studies. As stated in their Major Legislative Proposals for 1964, the Regents hold that if a modest tuition charge were to be made consistent with that set by State University, a desirable uniform pattern would prevail throughout all publicly supported higher education in the State. A contribution from the student in the form of tuition and fees is reasonable in the light of the benefits he obtains personally, and in view of the skyrocketing costs of higher education. In January, 1964, the Regents issued a statement to clarify some of the issues and to provide detailed information on their position. This has been brought up to date and is available upon request. The statement makes clear, for example, that if City University were to adopt a tuition and financial assistance program similar to that of State University there would be additional awards to all students from families in the lowest income brackets.[9] Therefore, the argument that such students would be handicapped financially would not be valid.

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[9] "Regents Statement on a Tuition Policy at the City University of New York." This may be obtained from the Office of Planning in Higher Education, State Education Department, Albany. See also State University of New York Revised Policy on Tuition and Fees, a report by the Board of Trustees, January 1963.

Regents' Comment and Further Proposals

The barriers to college admission and attendance must be reduced further if we are to reach full opportunity for higher education for the State's citizens. College-going still is influenced too much by the ability of the student to raise the money to meet costs of attendance and by geographic accessibility, rather than being based upon a choice of the program best suited to the individual's needs for personal and occupational advancement. Students choosing certain types of specialized post-high-school programs face a special barrier because such State aid as the Scholar Incentive Program is not available to them. This is true, for example, in the case of programs in hospital schools of nursing, business schools, and other single-purpose schools or institutes.

The program of Regents Scholarships is unparalleled among the states in its impact on freedom of student choice in higher education. However, if the number of scholarships remains fixed while the size of the graduating classes increases from year to year, the State will be assisting a smaller percentage of the high school graduates to attend the college of their choice. In the future this will discriminate against some able students who will be members of larger graduating classes. The opportunity to win a scholarship should be based on ability and not on the size of the class in which the student happens to graduate. The State should return to the earlier practice of establishing the number of Regents Scholarships, not as an absolute number, but as a percentage of the graduating class of each year. Also, the amounts to be awarded require periodic adjustment in order to yield the same benefit as costs change.

Additional State efforts must be made to provide greater freedom of choice in higher education and to enroll a larger percentage of our "college potential" citizens. Even if the private colleges, State University, and City University achieve the enrollment goals set for themselves by 1970, there will be a gap of from 49,000 to 181,000 between the number of students enrolled full time in colleges and universities (two-year and four-year) and the number of 18-21 year olds in the State's population at that time who would be capable of succeeding in college study. Whether the lower or higher figure is chosen to describe the gap depends on which of the two estimates of college-going potential made in Part II is chosen. In either event, the waste of human resources is sizable and deplorable.

This is especially true with respect to the talents and abilities of persons in the lower socio-economic classifications of populations and those who have limited cultural backgrounds. During the past few years the colleges and universities have understandably paid increasing attention to the problem of extending higher education to the culturally deprived. Notable among these efforts is the statement prepared by the special committee appointed jointly by the Association of Colleges and Universities of the State of New York and the State Education Department. This statement provides an excellent model for institutional self-appraisal and a sound basis for improving services to people who otherwise would be left out of the mainstream of higher education.

The Regents:

(5) Recommend that State University develop plans for expanding enrollment in community colleges by greatly increasing regular day work-study and other programs which make post-secondary education available to recent high school graduates and adults who would not otherwise be reached.

(6) Recommend that private four-year colleges and universities which have unfilled places for new students at junior-year level give full information to the community and junior colleges. Such information should include number of vacancies and the procedures for student transfer with minimum loss of time and energy.

(7) Recommend the establishment of a program of "Regents Junior Year Transfer Scholarships" for community and junior college transfer students who demonstrate superior promise for continued college study while attending community colleges or privately controlled junior colleges.

(8) Recommend to City University and State University that in planning for any new baccalaureate degree institutions, further consideration be given to the creation of upper-level colleges. These colleges start at the typical junior year and continue through the master's level in suitable academic fields.

(9) Recommend that the Legislature return to the principle of fixing the number of Regents College Scholarships to be awarded each year as a percentage of total high school graduates to avoid discriminating against the able students of the future who will be members of larger graduating classes.

(10) Will seek adjustments periodically in the amounts awarded under the Regents College Scholarship, the Scholar Incentive Program, and other assistance to students. This is necessary to keep student aid realistically related to the costs which students and parents must bear to elect programs and colleges of their choice.

(11) Recommend that the Scholar Incentive Program be extended immediately to include student nurses in registered nurse programs at hospital schools of nursing.

(12) Will direct the State Education Department to make a special study of the programs and costs carried by students entering other types of specialized post-high-school institutions (business schools, single-purpose technical schools, etc.) to determine whether the Scholar Incentive Program should be extended to include additional specialized institutions.

(13) Recommend that State University and City University for institutions within their respective systems clarify and describe procedures to facilitate placement and transfer of students, and make this information available to all other interested institutions.

(14) Recommend that City University move rapidly to strengthen the faculties and programs of the schools of general studies (programs now for late afternoon and evening study), emphasizing their function of providing upper-division work for transfer students from community and junior colleges.

(15) Recommend that all higher educational institutions improve their services to the culturally deprived by using the plan for institutional self-evaluation and the guidelines as formulated by the College Committee on the Disadvantaged appointed jointly by the Association of Colleges and Universities of the State of New York and the Commissioner of Education.

2. TO MEET THE NEEDS OF THE ECONOMY AND OF THE SOCIETY FOR SPECIALIZED MANPOWER

A discussion of the needs of New York State for personnel with special training and talent was presented in Part II. These persons are necessary to staff business and industry; to fill the ranks of the professions, technological workers, and semi-professionals; and to provide leaders for government and society at large.

Some answers to the question in Part II are considered in the following section by (1) examining the colleges' planned expansion in production of degrees to which specialized career fields are related, (2) examining plans for continuing education and other special services that bear on the production or maintenance of special skills and talents, and (3) looking at the special studies that leaders in colleges and universities are conducting and the discussions they are carrying on relevant to the institutions' role in meeting manpower needs.

As this Regents Plan goes to press, a wide variety of different agencies and organizations in New York State are also seeking answers to the manpower problem and giving special attention to strengthening the State's business, scientific, and technological enterprise. They include a number of special bodies established within recent years, such as the Science Advisory Council, the Advisory Council for the Advancement of Industrial Research and Development, the State Manpower Advisory Council, the Interdepartmental Committee on Manpower, and the New York State Science and Technology Foundation, as well as the longer established agencies such as the Departments of Commerce, Education, and Labor. All are concerned with the State's quest for personnel with specialized talent and training: a quest that in the final analysis leads to the colleges and universities and the offices of higher education of the State Education Department.

An Early Conclusion: Present Research and Planning Inadequate

The flow of students through the "production line" of higher education in a democratic social order should not be controlled by factors other than the ability and the free choice of the students. Their choices are conditioned by many things such as the earnings attached to various career fields, the status given different fields by society, the effectiveness of guidance and information about career choices provided to the students, and less tangible influences within the culture in which the students live. Because of the variability of these factors, educators hesitate to make predictions concerning how many students will be graduated year by year in particular fields of specialization.

With respect to New York State, the plain fact is that the research and planning energies of colleges and universities have been too much taken up with other matters to allow an accurate appraisal of the flow of students to graduation in specialized fields. The Office of Planning in Higher Education directed a questionnaire to the colleges of the State asking for predictions to 1970 of the number of graduate degrees that would be granted in each of the major academic departments or divisions. Most colleges supplied information, but emphasized that such data were highly speculative. Two major private universities replied independently that such projections had not been attempted, but that the inquiry had stimulated interest toward doing so in the near future. Neither State University nor City University in their 1964 Master Plans report the production of graduates expected in the foreseeable future, even in terms of totals for the institutions reported.

Summary of Current Plans

Although the conclusion is correct that present research and planning are inadequate to provide clear and complete answers to questions of needed manpower and the role of the colleges in providing it, there is still a body of meaningful information on the subject that can be reported. To gather and summarize this information, it was necessary to go beyond the formal plans submitted by the private colleges and the 1964 Master Plans of State University and City University. By doing this a better current basis for interpreting the supply and demand of trained manpower was established. Furthermore, it is from this base of current information that steps toward improved and extended studies of manpower have to be projected.

Institutional Plans

The great need in New York State for specialized manpower will place a heavy burden on all levels of higher educational preparation because, directly or indirectly, collegiate study for most students leads to a specialized career. The burden must be recognized, however, as most heavily placed on the graduate and professional programs in the colleges and universities. An examination of the role higher educational institutions play in producing specialized manpower, therefore, must consider both the undergraduate and graduate degrees they have granted and plan to grant.

Over the five-year period 1958-59 to 1962-63, the number of degrees granted by New York institutions increased at all levels. This is shown in Table 8. Of significance to statewide planning, moreover, is the fact that for the latest year shown in the table, the private colleges granted 97 per cent, or 1,554, of the total 1,600 doctoral degrees granted, and 75 per cent of the 12,539 master's degrees. It is essential to the State that these institutions continue and expand this service. But to meet the State's needs, the major expansions of graduate programs planned by both State University and City University are also necessary.

Despite the rapidly increasing enrollments in colleges and universities, all evidence points to a continued shortage of long duration in practically all career fields requiring specialization. The most complete analysis of demand, made by the State Department of Labor and entitled Jobs--1960-70, reports that in 1965 there will be 1,043,500 professional, technical, and semi-professional workers needed in the State and that by 1970 this figure will become 1,184,000, or 1.13 times the 1965 figure. Based on recent historical ratios of degrees produced to students enrolled in college, the Office of Planning estimates that in 1965 a total of 88,000 college degrees will be produced and that this figure will be 114,000 in 1970, or about 1.30 times the 1965 level. Since less than half the persons earning degrees in any year represent net additions to the work force, the increase is barely enough to keep pace with the increase in demand, to say nothing of handling needed replacements or correcting significantly for shortages that now exist.

Even if the expectations of over-all degree production are achieved, there is still the problem of getting students into particular specialized fields of study. Counseling and guidance have only a limited influence in encouraging student decisions to enroll in the fields leading to occupations most in demand.

This fact is of extreme importance in evaluating plans in selected areas. Engineering is a pertinent example. The private colleges and universities have reported plans to expand graduate and professional education in engineering up to 50 per cent between 1964 and 1970. However, in recent years undergraduate schools of engineering have reported unfilled places for students. Thus there is no evidence that the 187 per cent expansion estimated to be needed in first degrees in engineering in Table 2 will be met. If it is not, the failure will be not because of lack of programs but because of under subscription of available programs by enough competent students.

In fact, no evidence was found that the gap between estimated need and number of degrees in 1962 in any of the ten fields shown in Table 2 was due to a lack of programs or places available in programs except in the health sciences. Special attention is called to the need for optometry. This was not among the fields listed in Table 2 because this table considered only programs operating in the State. There has been no college program in optometry in New York since 1956. On the other hand, pharmacy, which was listed in table 2, would not appear to be in need of new or expanded programs, since institutions reported unfilled places.

Table 8

DEGREES GRANTED BY LEVEL OF DEGREE AND TYPE OF INSTITUTION INSTITUTIONS OF HIGHER EDUCATION, NEW YORK STATE, 1958-59 and 1962-63

Type of Institution	Associate Degrees	4-Year Bachelor's and 1st Professional Degrees	Second Level	Doctorate	Total
4-Year or More					
Private					
1958-59	851	27,448	9,150	1,459	38,908
1962-63	1,108	30,280	9,434	1,554	42,376
Public - SUNY					
1958-59	--	3,995	953	13	4,961
1962-63	132	6,511	1,483	46	8,172
Public - CUNY					
1958-59	521	6,494	1,089	--	8,104
1962-63	517	7,717	1,622	--	9,856
Total					
1958-59	1,372	37,937	11,192	1,472	51,973
1962-63	1,757	44,508	12,539	1,600	60,404
2-Year					
Private					
1958-59	581	--	--	--	581
1962-63	1,055	--	--	--	1,055
Public					
1958-59	4,281	--	--	--	4,281
1962-63	7,251	--	--	--	7,251
Total Private					
1958-59	1,432	27,448	9,150	1,459	39,489
1962-63	2,163	30,280	9,434	1,554	43,431
Total Public					
1958-59	4,802	10,489	2,042	13	17,346
1962-63	7,902	14,228	3,105	46	25,279
State Total					
1958-59	6,234	37,937	11,192	1,472	56,835
1962-63	10,063	44,508	12,539	1,600	68,710

More complete and detailed evidence of the need for personnel in the health professions was provided in 1963 by a special Committee on Medical Education appointed jointly by the Governor and the Board of Regents. Its comprehensive report [10] gives data on the need for physicians, dentists, nurses, and for personnel to provide a variety of related health and social services. Steps have been taken to implement some of the Committee's recommendations. For example, State University's Master Plan for 1964 includes a proposal to establish a new medical center on Long Island as part of the State University at Stony Brook, and to initiate studies to determine the proper location for an additional medical center to be established during the 1970's.

Two other steps toward reaching the Committee's objective of increasing the number of qualified practitioners were taken by the Regents early in 1964. One of these was the adoption of new policies to serve as guidelines to the State Education Department in recommending the admission of foreign medical graduates to the state licensing examination. Physicians trained abroad can now demonstrate competence through a program of proficiency examinations coupled with varying amounts of approved hospital training and supplementary education. The other step was the amendment to the Education Law which now makes it possible for the Board of Regents to endorse acceptable medical licenses from other states on the basis of two years of successful practice instead of five.

In nursing, the Associate Degree Nursing Project jointly undertaken by Teachers College of Columbia University, State University, and the Education Department has helped establish a pilot group of twelve new nursing education programs in community colleges throughout the State and has set a pattern for a substantial increase in educational facilities for nursing. [11] This project is an excellent illustration of what can be accomplished through statewide cooperation. Staff and facilities were contributed by public and private universities, community colleges, and public and private hospitals. The project was supported by a grant from a private foundation and continued with funds from the State, the communities, and student tuition.

The Special Committee on Medical Education has recommended the expansion of programs in the health service technologies to prepare ancillary personnel for medical and dental fields. To help carry out the Committee's recommendation for study and action programs for the preparation of these personnel, a five-year project, the Community College Health

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[10] Education for the Health Professions, A Comprehensive Plan for Comprehensive Care to Meet New York's Needs in an Age of Change, June, 1963. A report to the Governor and the Board of Regents from the New York State Committee on Medical Education, Malcolm Muir, Chairman.

[11] Final Report to the W. K. Kellogg Foundation. New York, The Associate Degree Nursing Project, Robert E. Kinsinger, Director, July 1, 1964.

Careers Project, was launched in 1964. The project is based on development of the vast potential of the community colleges for alleviating serious statewide shortages of health service technicians.

Thus it appears that with the exception of the health sciences, the colleges and universities are providing sufficient programs for the trained manpower needed by the economy. The problem is not primarily one of providing more new and expanded programs of higher education, for on this score progress seems assured. The difficulty is identifying and attracting qualified students to programs of education for those occupations which are critical, of retaining them through first and higher degrees, and of bringing them back for further education when necessary or desirable. Devising a method of solving these problems has been plaguing many minds but remains elusive.

Graduate and Professional Programs.-An indication of the way higher educational institutions will assist in meeting the expanding needs for persons with specialized training is found in their plans to expand graduate and professional programs. Such plans are reported by each of the major components of higher education.

Seven private institutions plan to offer new doctoral programs by 1968. Three of these are located in New York City, two on Long Island, and two are upstate. The planned expansion of capacity for full-time students is expected to be about as follows: 20 per cent in engineering, 20 per cent in physics, 10 per cent in each of the fields of mathematics, biology, speech and hearing, and medicine, and under 10 per cent in French, literature, sociology, and the combined areas of business and history.

A total of sixteen privately controlled higher educational institutions plan to offer new master's degree programs by 1968. They are distributed geographically as follows: Buffalo Area, two; Capital District Area, two; Long Island Area, two; New York City, eight; Northern Area, one; and Rochester Area, one. By fields of study, 45 per cent of the capacity for full-time students in the planned new growth of master's programs is in engineering, about 20 per cent in education, 20 per cent in business, slightly under 10 per cent in religion, and the balance in seven different fields.

As already stated, the colleges and universities were able to provide only fragmentary information about the expansion of enrollments expected in specialized fields of study. The information that was reported indicates, however, that an expansion of about 50 per cent can be expected in graduate engineering programs, over 30 per cent in graduate professional education, and over 50 per cent in graduate fields in the arts and sciences.

A number of specific proposals advanced by State University are relevant to the State's needs for specialized manpower. Examples are the proposals to establish a new School of Social Work at Albany and to explore feasibility of establishing a graduate school of library science. City University in its plan also provides relevant proposals, for example, new doctoral programs in eight fields of study. Neither University, however, provides detailed information on enrollments or graduates expected as a result of the implementation of these proposals.

Programs to Prepare Technical and Semi-Professional Workers.- Although a variety of sources of supply for trained technicians and semi-professional personnel is found in New York State, the colleges, especially two-year institutions, are expected increasingly to provide many of these workers. The Regents have taken the position that training technicians and semi-professional personnel is one of the chief responsibilities of the comprehensive community college, although not to the exclusion of other types of colleges and schools

There are many reasons to support the view that the comprehensive community colleges play the major role in meeting the needs for highly trained technicians. One of them is that these types of programs do not flourish in the setting of four-year institutions. In 1963-64 only twenty, or about one out of eight private four-year institutions offered associate degree programs. There are only four private baccalaureate degree-granting institutions which plan to offer new associate degree programs by 1968. One is in New York City, one on Long Island, one in the Mid-Hudson Area, and one in the Capital District. These colleges report plans to establish two new associate degree programs in nursing, one in basic studies, and one in general education.

Neither does it appear that the private two-year colleges intend to play a significant role in preparing middle occupation workers. The figures shown in the tabulation below indicate that of the 32 private two-year colleges operating in the State in 1963-64, only 10 were offering occupational programs, and these provided a total of only 53 curriculums. This information indicates little ability on the part of the private two-year colleges in the near future to train technicians and semi-professional personnel.

Curriculums Offered by Private
2-Year Colleges, *1963-64

Classification of College	Number of Colleges	Number Colleges Offering		Number of Curriculums Offered		
		Pre-Professional Programs	Occupational Programs	Total	Pre-Prof.	Occup
Church-related						
Religious only	17	17	-	17	17	-
Lay students also	6	6	2	12	6	6
TOTAL	23	23	2	29	23	6
Non-church related	9	7	8	55	8	47
Total	32	30	10	84	31	53

* Includes Briarcliff which in 1964 was authorized to change to 4-year status

Seven private colleges now classified as two-year institutions report intent to establish new associate degree offerings. Three are in the Buffalo Area and one each in New York City, Capital District, Mid-Hudson, and Rockland-Westchester Areas.

In contrast to the picture of technician and semi-professional education among the private institutions, developments in the public two-year institutions are significant. A total of 103 separate curriculums for public community colleges has been approved by the State University Board of Trustees and the State Education Department since July 1, 1962. Of these, 86 have been in occupational fields and 17 in the general arts and sciences preparatory to further study. It is recognized that training for particular occupations calls for more specialized courses than are required in pre-professional education, but even so the data indicate that the community colleges are making commendable efforts to establish training programs for workers in the middle occupations. However, the Education Law as now written does not permit community colleges to offer two kinds of service in regular day programs which would be desirable. At present their regular day programs may not offer curriculums of less than two years' duration, nor serve students who have not graduated from high school.

More needs to be done than simply to provide curriculums to produce enough technical and semi-professional manpower. This is evident from the declining proportions of students enrolled in occupational as opposed to pre-professional curriculums in the public two-year colleges in recent years, dropping from 95 per cent of the total enrollment in 1953-54, to 87 per cent in 1958-59, to 75 per cent in 1960, and to 69 per cent in 1964. Better counseling and guidance of students and improved public appreciation of the need and value of occupational studies at the post-high-school level are necessary.

The increased emphasis on occupational programs stressed by the Regents cannot be provided without a larger supply of qualified instructors. Yet nowhere in the State is there a large-scale program geared to provide instructors needed in growing numbers to teach post-high-school technical and semi-professional courses.

Continuing and Adult Education Programs.-Programs for continuing and adult education often have been regarded as a way of using spare time and otherwise idle facilities. They must now advance to a position equal with other academic services if the obligation to keep managerial, professional, and semi-professional workers abreast of developing knowledge is to be fulfilled, and, just as important, if people are to be better prepared for lives in which leisure is increasing.

Information gathered indicates that the private colleges in general intend to serve persons in need of continuing education after formal attendance at school or college has ended. In so doing, these institutions demonstrate intent to continue an educational service for which they have long been counted on in New York State. From the data in Table 9 one can observe that in the year 1961-62 it was the privately controlled colleges

Table 9

Enrollment in Extension, Special Media Courses and Adult Education, 1961-62

Classification of Institution	Resident Degree Credit: Extension	Resident Degree Credit: Courses by Mail, TV, Radio	Non-Degree-Credit: Adult Education	Non-Degree-Credit: Courses by Mail	Short Courses
4-Year					
Private*	3,207	121	20,711	7	738
Public					
SUNY**	3,286	0	261	0	0
CUNY	0	0	10,858	0	40
Total Public	3,286	0	11,119	0	40
Total 4-Year	6,493	121	31,830	7	778
2-Year					
Private	8	8	161	15,000	0
Public	0	0	9,342	0	258
Total 2-Year	8	8	9,503	15,000	258
STATE TOTAL	6,501	129	41,333	15,007	1,036

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* Includes enrollment of SUNY contract colleges (Agriculture, Home Economics, School of Industrial & Labor Relations, and Veterinary College) at Cornell; Cornell reports a total enrollment of 287 in resident extension, including the contract colleges.

** Includes enrollment for College of Ceramics at Alfred, the contract colleges listed above, and former University of Buffalo (now SUNY at Buffalo).

Derived from statistics in Table 16 of OE-54032, Circular No. 743, Comprehensive Report on Enrollment in Higher Education, U. S. Dept. of Health, Education, & Welfare that showed the heaviest enrollments of students in programs classified as "extension, special media courses, and adult education."

However, quantitative data on the extent that private colleges will continue to offer these programs are difficult to gather and compile. Institutions are reluctant to estimate their reach and commit themselves to such programs. This is true even though the institutions which would attract most of such students express a willingness to serve needs beyond their immediate campuses and present constituencies if they had the resources.

State University has proposed "that programs of continuing education be expanded, placing particular emphasis upon the retraining of displaced workers, providing refersher courses for professional workers, and meeting the cultural needs of our citizens."

City University has proposed to give special consideration to professionals seeking updating of competence, to public officials desiring special training, and to others who do not seek a degree but need and are capable of serious graduate study. It also has proposed to undertake two more specific responsibilities. The first is planning, in collaboration with other New York City universities, to accommodate members of foreign families brought to New York City by the United Nations and other international centers. The second is the expansion of existing urban research into an Urban Studies Institute to support basic research in a number of fields on which the solution of serious problems in the Metropolitan Area will depend. Both proposals have merit for meeting needs outside the usual programs of undergraduate, graduate, and professional training.

Interest Within Higher Education.-The role to be played by higher educational institutions in meeting the needs of the economy and society for specialized personnel is increasingly a matter of study and dicsussion among persons in positions of responsibility in colleges and universities. At the annual meeting of the Association of Colleges and Universities of the State of New York held in October, 1964, a session was devoted to this topic. A major conference on the continuing training of specialized manpower sponsored jointly by the Advisory Council for Advancement of Research and Development and Columbia University was held at the University during the fall of 1963 and another similar conference took place at the University of Rochester a year later. The public community colleges of the State provided staff and related assistance to the study of employment in technical occupations in New York State undertaken cooperatively by the State Department of Labor and the State Education Department.

Regents Comments and Further Proposals

The planned efforts of all of the colleges and universities of the State to expand their production of personnel with specialized talent and training are in the right direction and in general should be supported. An important reservation is that some plans reported and some requests for registration of new graduate programs do not show sufficient established strength in supporting undergraduate programs nor do they present plans for the building of such a foundation. A second reservation has to do with the proposals of City University and State University to create or expand highly specialized schools relatively independent of all other university components. The creation of a specialized school outside of a more comprehensive instructional program endangers the level and quality of education achieved in the specialized school and the efficient use of faculty and facilities of comprehensive institutions.

More efforts than those recorded to date are needed. As already indicated, there are fields in which highly trained manpower is or will be in short supply which are not adequately accounted for among the plans for program and enrollment expansion in any of the constituent sectors of New York State higher education. Serious shortages exist and are expected to continue for the foreseeable future in rehabilitation and social work, college teaching, the health professions, engineering and scientific fields, and most technical and semi-professional occupations.

Graduate Education.-The most prevalent way to expand the supply of persons with specialized talent and incidentally to strengthen graduate programs in colleges and universities is to provide fellowships to graduate students. Among state programs of this type, New York's is one of the best. However, the level of stipends provided has not kept pace with competing national graduate fellowship programs such as those of the National Science Foundation, the National Defense Education Act, the Woodrow Wilson Fellowships, and others. The State's graduate fellowship programs will not attract and retain able scholars unless the stipends are raised and adjusted regularly for changing economic and educational conditions.

Another method of alleviating critical manpower shortages would utilize contractual agreements between the Board of Regents and institutions with resources and programs to help meet the State's needs. (See also pp. 79, 85) The use of such contractual arrangements was recommended by the Muir Committee on Medical Education. The Regents believe that the idea merits further serious attention, expecially where it can be shown that the contract agreement provides for the purchase of services to the State, thereby bringing existing resources to bear on the State's needs. In some cases, results could be achieved more quickly and economically this way than by other means.

Although other illustrations of the possible use of contractual agreements are at hand, the best and most promising one for implementation in the near future would be in the field of the medical profession. In addition to a new medical school on Long Island, State University has proposed that a study be started now to plan for a second medical school. The costs of a new medical school, including a teaching hospital, are enormous. The necessary staff must come from a national pool of medical educators who are already in short supply. It takes a long time to construct the facilities and to assemble a qualified staff. The needs through the years may show clearly that a second additional medical school should be constructed by State University, but the production of the number of physicians that a new medical school would eventually turn out, could be achieved much more rapidly and less expensively through the coordination and assistance of existing medical schools in the State. A tentative proposal to do something along these lines has already been formulated by the deans of the medical schools.

Up-to-date university programs in graduate and professional instruction and research require expensive and highly developed techniques and specialized equipment. Even well developed graduate schools are finding increasing difficulty acquiring and maintaining adequate resources of such equipment because of the rapidity of changes in knowledge and methods of research and the high costs involved. One particular resource for which all of these observations are true and which would greatly strengthen graduate instruction in the State, thereby assisting also in the improved production of specialized manpower, is that related to computer equipment of unusually large capacity. Such a facility would lead to expanded and strengthened graduate instruction and research. It would also serve as a pilot demonstration for similar projects among groups of graduate and professional schools.

Discussions have occurred involving college and university presidents, graduate deans, and other administrators on the urgent need by scientists and research faculty for access to large computers. They have suggested the possibility of organizing interinstitutional cooperative computer centers in the State. A feasibility study should be made. The large number of colleges and universities in the New York Metropolitan Area, with graduate and research programs and their geographical proximity, suggest that any study of such a facility should be conducted in that area. Still other recommendations and proposals to strengthen graduate education are mentioned elsewhere in this plan, including the following: the establishment of regional research and reference libraries; the establishment by the Legislature of a program of Regents professorships and a proposal by the Regents of a similar program of distinguished visiting professorships, the several proposals directed toward mitigating the impending shortage of new college teachers; the establishment of an Office of Science, Engineering, and Technology within the State Education Department to assist institutions; and, most important of all, the proposals for new and expanded graduate programs by City University, State University, and the private universities.

A few institutions have made plans for expansion of graduate education in the years ahead. The Regents strongly encourage each university which hopes to play a significant role in doctoral education to develop a ten-year plan of action. For its part, the Board of Regents will direct the State Education Department to provide all possible information and assistance so that the result will be a coordinated statewide plan looking at least ten years ahead.

Technical and Semi-Professional Education.-With regard to the State's requirements for technicians and semi-professional workers, there is need for a clarification of the role to be played by private institutions. The fact is that even those private two-year colleges which wish to serve broad constituencies tend to emphasize the liberal arts and sciences rather than occupational curriculums. In the first place, many privately controlled two-year colleges have a very strong orientation toward the programs of traditional four-year liberal arts colleges and would not choose to alter it. Factors working against more widespread development of occupational programs in private two-year colleges include the high costs of operating technical and semi-professional curriculums, the difficulty of acquiring qualified faculty to head occupational programs, the greater concentration on college preparatory courses found in the high schools with which many private two-year colleges are operationally affiliated, and the character of the guidance programs in these high schools, and often a conviction that a basic liberal arts education should be given priority. The accomplishments of private two-year colleges in such fields as nursing, secretarial training, and some other business fields is ample evidence that they can develop successful programs and sizable enrollments in occupational fields if they can acquire reasonable means to overcome the first two obstacles. The developing programs of federal financial assistance may be significant in changing the ability and interest of these colleges with regard to occupational programs.

Unless the private colleges develop more occupational programs, the breadth of choices available to students who wish to study in private institutions will continue to be unduly restricted. As a result, more students than would actually wish to do so may turn to public colleges, especially the community colleges. The consequences of such a turn on a large scale are important for long-range planning by both public and private institutions. If private enterprise does not voluntarily assume some responsibility for an important educational service, then public effort must take full responsibility.

There is need, also, to clarify the relative roles of college and secondary schools in training technicians and semi-professional workers. Occupational education does not lend itself easily to a conventional separation of responsibilities between these two levels. The people to be served seek a wide range of skills and knowledge and differ widely in age and in prior education. To accommodate these diverse demands requires careful planning and the closest educational articulation between levels.

Steps toward the development and implementation of an expanded vocational education program in schools controlled by local boards of education are under way in New York State. Articulation of this program with post-secondary institutions calls for the full utilization, in each community where they are available, of the community colleges and the agricultural and technical colleges to provide an expanded range of occupational curriculums for adults and youths beyond high school age. It calls, also, for the officials of these institutions to play an active role from the beginning in planning for new occupational programs in the community and in the continuous coordination of such programs.

Despite the Regents' strong support of the community colleges and their recognition of the significance of comprehensive programs in these institutions, they question the soundness of proposals to extend partial programs to sparsely settled areas of the State. The proposals for Saranac Lake and Plattsburgh pose serious educational issues, as does the timing of future expansion in the areas listed. Continued study of these particular local problem areas may produce better solutions. In this connection, the Regents emphasize their endorsement of the State University proposal that a program which cannot be supported in a community by enrollment of commuting students but which could be supported in one or more locations by residential students, will normally be established in an agricultural and technical college in preference to a community college. The Regents believe that this policy can be extended to over-all statewide planning with beneficial results.

Continuing and Adult Education.-There is now and will be increasingly in the years ahead a strong demand for expansion of "out-of-class" instruction at the higher education level. Such instruction, provided by extension classes, short courses, correspondence study, educational television, and other means besides resident instruction, is needed by many persons. It will help engineers, physicians, teachers, and others in professions which are affected by rapid changes in technical knowledge to keep up to date. It will help workers displaced by new industrial and business techniques to acquire new skills and understandings to change to other jobs. It will help the citizenry at large to attain a higher level of general education and to be effective members of an increasingly complex society. That the colleges and universities of the State are sensitive to these needs and willing to expand their services in continuing and adult education is also quite clear.

A general problem of wasteful duplication, however, exists whenever a number of institutions or networks of institutions are engaged in off-campus educational services. Steps should be taken early to forestall development of this problem in New York State.

The Regents:

(16) Recommend that all institutions of higher education which are expanding to help meet the State's manpower needs, build on already established strengths or pay special attention to the foundations laid before new programs of expansion are undertaken.

(17) Recommend that leadership in the private two-year colleges seek to develop a greater balance between transfer and occupational curriculums. This should be undertaken especially by those colleges which serve constituencies that in interest and talent are representative of the general population.

(18) Recommend that community and junior colleges expand their counseling and guidance services, with particular emphasis on occupational selection and training.

(19) Recommend that the private colleges seeking to expand occupational programs review carefully the opportunities that currently exist for Federal financial assistance for programs to develop technicians and semi-professional workers.

(20) Will direct the State Education Department to study the special costs faced by high school graduates who enter post-high-school occupational programs and to determine the feasibility and desirability of helping students to defray the costs.

(21) Will appoint a special committee representing the four major sectors of higher education in the State to prepare a plan for increasing the supply of trained community and junior college instructors in occupational fields.

(22) Will direct the State Education Department, in cooperation with State University, to give attention to the needs for in-service training of community and junior college instructors in occupational fields. These instructors should be helped to engage in organized periods of study to improve their effectiveness as college teachers. Persons with strong backgrounds of experience in technical and semi-professional work but with limited academic training should be aided in overcoming this deficiency,

(23) Will continue to encourage an articulated and coordinated development of both area vocational programs under local public school auspices and community college programs leading directly to employment as technicians and semi-professional workers. The State should continue to make full use of all available resources for preparing technicians and semi-professional workers, and such complete utilization should emphasize coordinated planning and development at both local and State levels.

(24) Recommend that the Education Law be amended to permit public two-year colleges to offer programs of less than two years' duration as regular day offerings when these programs meet the needs of persons who have graduated from high school or are beyond the usual age of high school attendance. ✓

(25) Will direct the State Education Department, in cooperation with State and City Universities and the Association of Colleges and Universities of the State of New York, to review present practices of all institutions offering extension services and to develop a statewide plan to expand, coordinate, and make effective use of extension programs.

(26) Will review periodically the number of graduate fellowships authorized in New York State and the level of stipends provided for these fellowships to determine improvements made necessary by changing economic and educational conditions.

(27) Recommend that the Trustees of State University and the Board of Higher Education of City University give special attention to steps which would integrate specialized institutions with those which are more comprehensive in scope. Special purpose colleges both at undergraduate and graduate levels which do not have clear operating relationships within general purpose centers of instruction and research should be discouraged.

(28) Will request the Legislature to authorize funds for a feasibility study of the establishment of a cooperative computer facility beyond the resources of any one institution to acquire, this facility to be used to strengthen graduate education and research.

3. TO STRENGTHEN INSTITUTIONS

The State's institutions of higher education, both public and private, must be greatly strengthened to meet the demand of the future. It will not be enough for them to maintain themselves at the level of the past. They must not only be larger and better than in the past, but they will be expected to respond effectively to a whole new world of unlimited dimensions. While this is strikingly illustrated by scientific and technological developments such as atomic fission and space flight, there are also dramatic changes in the arts, social studies, and humanities to which the college must respond. Considering the size, variety and nature of the tasks ahead, there is need to strengthen further even our most distinguished colleges.

Faculty

The single greatest threat to the quality of college instruction is the impending severe shortage of able and well-prepared faculty members. 12/ In the competition that will develop, colleges will have to maintain the best possible conditions to attract and hold good faculty members, improve salary schedules, and develop various types of in-service opportunities.

All possible actions to offset the impending critical shortage should be taken by all concerned: administrators and faculty of institutions of higher education, Federal and State agencies, and business and industrial leaders.

The Master Plans of both State University and City University contain a number of proposals and recommendations looking toward the strengthening of their faculties. The Regents warmly endorse these and urge all persons and agencies involved to give the proposals the highest possible priority. The budget requests of State University and City University for these purposes must be considered minimal.

From time to time the Department has held special conferences on the improvement of college teaching, and several of these devoted part of the program to a discussion of the shortages that everyone agreed would inevitably develop. The Regents College Teaching Fellowship Program, started in 1958, was one practical step taken in anticipation of the State's needs for more and better teachers. Not much else has developed as a statewide program.

12/ John Gardner, "Flight from Teaching," 1963-64 Annual Report, Carnegie Foundation for the Advancement of Teaching.

At present the view ahead is discouraging insofar as actually strengthening all college faculties is concerned. It is doubtful that the colleges and universities will be able to hold the present level of faculty preparation even though strenuous efforts are made. 13/ To create the best possible situation it will be necessary to make special efforts to identify and encourage prospective college teachers, change some of our procedures and practices in the programs leading to doctoral degrees, develop jointly various programs with business, industry, and government, and establish salary levels that compare favorably with off-campus offers even though not equal.

To help the universities bring to the State additional faculty members of great distinction, the 1964 Legislature established a program of Regents Professorships in Science and in the Humanities. Eventually chairs in ten universities will be supported by means of Regents contracts with outstanding scholars selected by the universities and by contracts with the institutions concerned to supply proper facilities, supplies, professional assistants, and such other services as may be necessary. The legislative act called for annual appropriations, up to $100,000 for each chair. By assisting universities to attract and hold additional scholars of unusual distinction the State hopes to stimulate the development of centers of excellence.

A parallel program of guest professorships primarily for undergraduate colleges is proposed by the Regents in order to sustain and enhance an atmosphere of intellectual vigor throughout higher education. Such a program over a period of years would enable a large number of college faculties to invite distinguished teacher-scholars to join them for short periods of time. Experience with such programs elsewhere has shown that both faculty and students benefit greatly. Since the graduate centers depend in large part on the undergraduate colleges for the identification, encouragement, and preparation of prospective graduate students, a program of Regents Guest Professorships would be a logical extension of the present program of Regents University Professorships.

The Department, in collaboration with all of the colleges and universities of the State, should again give special attention to matters related to the supply and demand for college faculty.

The Regents:

(29) Will direct the State Education Department staff in Higher Education to give special attention during the coming year to the impending shortage of new college teachers and to encourage and assist appropriate groups in taking steps to offset this emergency, including the following:

13/ Estimates of the additional teachers needed in higher education by 1969-70 vary from 35,700 to 50,000. According to an estimate in the Federal Office of Education, the number of doctor's degrees awarded in that year will be 18,300, with about 11,000 going into higher education.

Consult with the Council on Graduate Education and the Advisory Council on Higher Education on ways in which the time lapse between the bachelor's degree and doctorate may be shortened; take all possible steps to implement any feasible plan that can be developed.

Review and report to the Regents on the desirability and feasibility of the suggestion that a new degree be created short of the Ph.D. but involving a well-conceived new program of research and study.

Consider ways in which retired professors could be encouraged and assisted to continue to serve.

Give special attention to the recent report of the Governor's Committee on the Education and Employment of Women and to seek the Committee's further advice and assistance in respect to college instruction.

Organize a coordinated effort by colleges and interested civic groups to activate in each major region of the State a "college faculty resources registry" -- a directory listing of qualified personnel interested in part-time employment as college teachers.

(30) Explore with college administrators and representative faculty members possible ways to identify prospective college teachers early in their undergraduate programs and to encourage them in reaching their objectives.

(31) Recommend the establishment by the Legislature and Governor in 1965 and subsequent years of legislative support for a program of distinguished visiting professors at undergraduate colleges.

(32) Recommend that groups of colleges and universities that have close geographic and other ties develop interinstitutional cooperative programs and joint use of resources, human and material, to further the scope of their services to students and to the State.

Facilities, Budgets, Organization--Public Higher Education

The proposals in the Master Plans of the two public universities include a number of goals and recommendations to greatly strengthen their facilities. These can be found in the summaries given in Part IV. Almost all of the proposals are strongly endorsed by the Regents. Both institutions aim for distinction and increased service to the State; but they cannot attain the goals set forth in their Master Plans unless they are freed from unnecessary procedural restraints, and unless the necessary funds are put at their disposal.

Information on the budget requests for 1965-66 has been received and discussed by the Regents. The Regents consider these requests to be a realistic estimate of the level of support that these two universities require.

With respect to City University, State support is such a critical matter that the old and controversial question of the relative amount of support from the City and from the State to meet its needs should not be allowed to hold up funds needed, either for operations or capital development. City University should be provided the level of support from City and State sources indicated in its budget proposals; particularly the sums needed to expand the graduate programs proposed by the University by 1968. During the next year there should be developed an equitable over-all formula for determining State appropriations for City University purposes, including graduate education, and this formula should be advanced as an amendment to City University's Master Plan by 1966.

Although critically important, this matter of budget and an appropriate formula for State support is only one strand in a complex network of relationships involving the State and City University which has grown through the years without design or order. A confusing array of relationships and understandings, many of them informal, has resulted. They involve the Board of Higher Education and City University's Chancellor, the Mayor, the Board of Estimate, State University, the Regents, the Governor, and legislative leaders. A clarification and simplification of State-City relationships with respect to City University is urgently needed.

With respect to the community colleges throughout the State there are also a number of special problems. These institutions are legally identified under both State and local governments. Their legal structure was described briefly on page 6. They are clearly intended to provide opportunities for persons who need post-high-school education and who live within daily commuting distance of the community college. The Regents' policy on these institutions is presented in Appendix F.

Although based on sound and accepted principles of balanced local control with statewide supervision and coordination, the State's community college law needs improvement on several key points. One of these is the relationship that should prevail between the local sponsoring body (which by law provides one-third of operating and one-half of capital expenses) and the community college board of trustees. The evidence is quite clear that at present the structure allows the sponsor, through the budget approval process, to make or heavily influence educational decisions which ought to be fully controlled by the trustees. This problem is compounded in areas where more than one community college is found and the sponsorship is by more than one agency.

Another matter currently working in some cases at cross purposes with the original legal intent in founding community colleges relates to the "charge back." This is a charge imposed automatically on counties for attendance by their residents as students in community colleges maintained elsewhere. Conceived originally to enable students to get community college instruction when none was available in their home area, it now has two basic weaknesses which have become apparent with the widespread development of new community colleges. It forces a locality which maintains a community college both to support its programs and to pay for some resident students' attendance elsewhere. Many such students enroll in the same programs offered by the community college close to their homes. Current "charge back" procedure also enables some localities which do not now have a community college, but could afford one and also have adequate population to justify one, to exploit services provided by community colleges maintained by other localities. This exploitation is made more acute by the fact that there is no "charge back" provision at all for capital development costs.

In order to move more rapidly and in an orderly manner toward the goals for public higher education, the Regents believe that a number of steps should be taken.

The Regents:

(33) Will continue to support any additional legislative action needed to give State University the autonomy of administrative operation typical of the strongest state universities in the country.

Recommend that the following changes in the Education Law relating to community colleges be enacted:

(34) Abolish the provision authorizing establishment of a four-year community college.

(35) Provide that after a local sponsoring agency acts to establish the first community college in a given geographic area, the same agency must also be the sponsor of all later community college developments in that area.

(36) Clarify the realms of administrative jurisdiction and responsibility of the local sponsoring agency and the local boards of trustees of community colleges so that only the latter controls institutional operations such as the development of the budget, qualifications of staff, and specifications of physical plant equipment as well as matters of program development and instruction.

(37) Provide that, when a student leaves his home area where a community college exists, to attend one located elsewhere and enrolls in a program offered by the community college in his home area, no "charge back" to the area of residence should be levied. Provide further that exception to this general rule can be made for individual students if approved by the board of trustees of the community college in the student's area of residence.

(38) Establish another "charge back" to apply to costs incurred by a local supporting area for capital development and purchase of major equipment, with provisions similar to those relating to operating expenses.

(39) Recommend that the Board of Trustees of State University give further study to advantages and disadvantages of dormitories at community colleges.

(40) Recommend that State University be given encouragement and support in strengthening its program of institutional research and fact finding to improve both its own understanding and to aid in public interpretation of such matters as characteristics of the student body, faculty supply and demand, and fiscal needs for current operations and capital outlay.

(41) Will direct the State Education Department in cooperation with City University to study the merits of amending the Education Law to remove the identification of City University with the New York City public schools.

(42) Have requested the Commissioner of Education, in consultation with the President of State University and the Chancellor of City University, to recommend a course of action for clarifying the State's relationship to City University for the consideration of all interested parties not later than December 1, 1965.

(43) Recommend that the Education Law be amended to authorize State appropriations for current operations to City University to be made on a current rather than a reimbursement basis.

(44) Recommend that the Education Law be amended to give a continuing statutory basis to the present legislative practice of providing from State appropriations payments to New York City to assist it to meet costs of physical facilities for higher education.

(45) Recommend that the Education Law be amended to authorize payments from State monies to City University for use in paying half the cost of construction of physical facilities as opposed to half the cost of debt service for higher educational capital development, as is now the case.

(46) Recommend that consideration be given to making payments for construction costs to the Board of Higher Education rather than to the Board of Estimate of the City of New York so that the University can participate more fully and flexibly in the programs of the State Dormitory Authority and the Higher Education Facilities Act of 1963.

(47) Recommend that there be developed an equitable over-all formula for determining the State appropriation to City University, including graduate education, and that this formula be advanced as an amendment to City University's Master Plan by 1966.

New Approaches to Teaching and Learning

The pressures of overwhelming numbers of persons seeking education beyond the high school, shortages in personnel and staff, increased requests for assistance from business, industry, government and society in general will require that institutions of higher education use new approaches and devices, some of which will be strange and distasteful to both faculty and administration. But these must be explored fully. A number of institutions in the State have been doing so for many years. Others have more recently started their pioneering efforts. The pace generally has stepped up and yet one would have to say that the over-all picture is pretty much "business as before." This is due not only to a sincere preference to continue long established procedures which have brought quality and variety to American higher education, but also to a distrust of extravagant and enthusiastic claims sometimes made on behalf of television, programmed learning, and other "devices."

The task ahead is to involve able teachers of subject matter fields in working with new media and in developing the testing programs which will give them evidence that the changes introduced to stimulate and assist the student to learn have produced students as competent as those exposed to the traditional approaches. Unless the community of scholars and teachers that constitute a college faculty is so convinced, few real changes bearing directly on classroom instruction will be made. The ones that are made, moreover, will not be as productive intellectually as they should be because they will not be guided and supervised by the ablest members of the faculty. Experts in communication have a most critical role here. They have the best understanding of many of the techniques that could bring about dramatic advances. But in the last analysis, they can only advise and assist the instructor.

A further task is to encourage able faculty, and periodically to help them through reasonable grants of time and money, to redevelop and rearrange the materials in their courses, in order more clearly to define their essential role as teachers. The teacher is indispensable in handling certain sections of most formal courses of instruction. The materials in other sections, however, can be handled by the student himself with a high degree of independence if the necessary guidance and source materials are provided. This viewpoint is neither new nor profound. Many demonstrations at the college level have shown that the time and effort of the best teachers can be used more economically and just as effectively if the student is expected to assume a greater responsibility for his own education. The procedures are not new but some of the devices and techniques are.

Regents planning on a statewide basis for the introduction of such devices is not new either. For more than ten years the Regents have urged the development of noncommercial educational television in New York State. In 1952 they proposed the first major statewide ETV system in the country, which envisioned the activation of ten UHF channels located throughout the State. A bill appropriating funds for implementing the plan was approved by the Legislature in 1953 but vetoed by the Governor.

In the intervening years the Regents have continued to press for funds to encourage and support development of ETV. In the meantime, with modest State help, several nonprofit groups, schools, and colleges have successfully launched educational television in several parts of the State. Special credit is due the nine educational television councils whose valued efforts have been a major factor in keeping educational television alive.

In 1962, a new statewide plan based on the recommendations of the Starlin Report[13] was proposed by the Regents. Early this year at the request of the Governor, the President of State University outlined a five-year plan for developing an ETV network within the University which, when coordinated with the statewide plan envisioned in the Starlin Report, would provide the State with excellent ETV facilities.

Innovation will be necessary not only in the classroom, but throughout the management and organization of the institution as a whole. To accommodate the increased enrollment some institutions have already changed the academic year to use the summers more fully and the instructional day from early in the morning to late at night. Savings in plant operation are usually not as high as might be expected, yet there is some economy in operation per student and a very great saving in capital costs if the only other alternative is to build another building or even a campus.

The State has a deep vested interest in all these possible changes: in the first place, because of the greater educational opportunities that would accrue to its citizens as a whole; and secondly, because costs could be reduced.

The Regents:

(48) Recommend that all New York colleges and universities promote the practice of granting advanced credit in those fields for which proficiency examinations have been passed, regardless of whether the competence of the student was developed through formal instruction or through independent study.

(49) Will expand the number of fields of studies for which State Education Department proficiency examinations are available as rapidly as possible, with priority given to such courses as anthropology, business, professional education, and statistics.

(50) Recommend that institutions serving large enrollments or offering complex, advanced programs, plan as rapidly as possible to develop on-campus educational facilities (closed circuit or 2500 megacycle transmission).

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[13] Glenn Starlin, Television and Higher Education, A Plan for Statewide Development in New York. The State Education Department, Albany, 1962.

(51) Recommend that individual institutions (public and private) consider the development of a "college communications center" and programs of training of faculty in the use of all parts of such a center. These centers facilitate a coordinated and complete use of educational communications materials and equipment, such as radio, television, programmed instruction, library resources, and computer-related instructional aids.

(52) Will continue their efforts to secure a statewide educational television network in cooperation with State University, other colleges and universities, and the educational television councils.

(53) Recommend that all colleges and universities, private and public, which have not yet done so, intensify their studies, experimentations, and actions to establish year-round operations, and in doing so examine not only the mechanics involved but also ways to provide a full range of programs throughout the year.

Libraries

Libraries, more than most other areas of public service, require full and complete planning to include every level of library use. The cost of libraries, the rapidity with which library materials are being produced, and the need to prevent wasteful duplication should discourage institutions of higher education, both public and private, from trying to develop their own independent and complete library services. Cooperative effort in such functions as planning and purchasing is the key to the ultimate solution for library development. Since libraries are a critical part of successful higher education, planning for library services should be given a high priority.

Mounting enrollments in undergraduate institutions of higher education, plus a strong emphasis on independent study and wide reading, have brought into sharp focus the inability of most college and university libraries fully to meet the demands. Lacking a cooperative structure for planning of acquisitions, referring unmet requests, and providing bibliographical information, college libraries are hard pressed to supply the general services that are needed. At the same time, all types of libraries, academic, special, and public, are now involved in the problems of library service at the reference and research level. Specialists and all research workers are faced with a growth of knowledge and a concomitant expansion of the printed word. This makes it increasingly difficult for scholars to be familiar with the mountainous volume of reference and research materials coming from today's new discoveries on every front. Solutions involving all types of libraries must be found because adequate library service is vital to the growth and development of business, industrial, and academic research.

The need for improved reference and research library service in New York State was brought to public attention in 1960 when the Commissioner of Education appointed a committee to study the problems of library service of an advanced nature. After successfully developing a network of 22 basic public library systems, the task of providing a capstone to this structure was undertaken. In 1961, the Report of the Commissioner's Committee on Reference and Research Library Resources was issued. This report stressed two concepts: the need for a total coordinated program which includes all types of libraries, and the need for a flexible plan capable of meeting the changing needs and a changing technology.

The Board of Regents have included in their legislative program for 1965 a bill to aid in the development of reference and research library resources.

The proposed act would:

1. Establish an advisory State Reference and Research Library Resources Board to consist of nine members, appointed by the Regents.
2. Provide for the establishment of regional reference and research library systems upon the request of the boards of trustees of educational institutions providing reference and research library service and upon the approval of the Commissioner of Education.
3. Provide State aid to the regional reference and research library systems.
4. Appropriate a sum to the Education Department to be utilized for the development of a statewide program of reference and research library resources.

Regional and State level programs would be developed to insure that all the residents of the State can identify, locate, and gain access to the reference and research library materials they need.

The Regents:

(54) Recommend establishing a statewide system of regional reference and research libraries along the lines described in the Regents special committee report of 1961; this should be set in motion by a pilot project for which the Regents have requested funds from the Governor and Legislature for 1965-66.

Museums

Museums provide educational opportunities that supplement the schools in their programs of regular and adult education. A survey of 179 museums in New York State in 1961 recorded over two million student visits, equal to half the public school enrollment. A million school visits occurred in New York City alone. General attendance is now over twenty million.

The public does not generally recognize, however, that museums of the State are also integral parts of higher education. Their collections are essential to the transmission of our cultural heritage. They preserve, conserve, and interpret these materials for a wide range of publics. Museums must maintain staffs of specialists who can organize material into orderly systems so that these collections can be studied and interpreted. Museums, therefore, are reference centers for the training of specialists in systematic biology, paleontology, and in those subject areas of anthropology, history, and fine arts, for which collections are essential research resources.

For years graduate students in neighboring universities have received training under museum faculties. A variety of opportunities for undergraduate study has also been provided. In these and other respects museums have played an important role in higher education. That the museums in New York State do in fact contribute significantly to education at the highest level is evidenced by the answers to a letter of inquiry on this matter. Museums located throughout the State report that they cooperate with university graduate schools in training students in such fields as anthropology, art, botany, history, geology, paleontology, and zoology.

The museum resources within New York State are superb. Lack of funds, however, is seriously limiting the availability of these resources. The demands for educational services of museums are increasing at a more rapid rate than the funds for their support. This was made clear in a report to the Regents two years ago by a committee of distinguished museum authorities.14/ The committee strongly urged that the State give supplementary financial support to strengthen and expand the educational use of museums. The Regents agree that any comprehensive plan for higher education should include State aid to museums in order that they may not only maintain their present research and teaching resources, but also develop them more fully.

The Regents:

(55) Recommend that institutions of higher education increase their use of the resources available in the museums of the State by establishing additional cooperative relationships for research and undergraduate instruction. Joint use of facilities and highly specialized staff in such areas as anthropology, history, and fine arts is urged, along with the development of more formally organized opportunities for students to earn college credit through individual study and proficiency examinations.

(56) Have drafted a statewide plan for expanding and strengthening museum services; legislation implementing this plan and budgetary support for setting the plan in motion should be provided.

14/ Report of the Commissioner's Committee on Museum Resources 1962. The University of The State of New York, The State Education Department, New York State Museum and Science Service, Albany.

4. TO IMPROVE STATE SERVICES TO THE COLLEGES

State services to the colleges and universities have been provided in the past by the State Education Department, the Dormitory Authority, and the Higher Education Assistance Corporation. The programs of the last two are described in their annual reports. Their excellent contributions are recognized elsewhere in this statement and no changes are proposed.

The services of the State Education Department will be considered briefly in the following paragraphs because the trend shown in recent years indicates the probable future development of such services to the campuses of the State.

As might be expected in the light of the State's growing activity in higher education and the increase in size and number of colleges and universities, the State Education Department staff directly concerned has been expanded. Relatively little of this expansion, however, has occurred in the Office of Higher Education. This unit is responsible for handling the increase in such legally mandated matters as charters and approval of curriculums. Since these duties are heavier than before and as important as ever, the Office's staff should be augmented.

Three new offices serving higher education have been established in the State Education Department since 1961. Each of them is manned by a small staff which can concentrate full time on special services to the colleges throughout the State. These offices focus their attention exclusively on areas in which there is a critical situation due either to a shortage of personnel or to the size of the tasks ahead. The Office of Foreign Area Studies, giving special attention to the non-Western civilizations, is an example of the former; the Office of Administrative Services illustrates the latter. Both offices have provided a wide range of services for colleges and universities and have stimulated cooperative programs in every region of the State.

The third recent addition is the Office of Planning in Higher Education. This was established originally to assist the Regents and Department to develop the Regents Plan. Since the Regents' responsibility for planning is on a continuing basis, a number of studies and special projects are contemplated between the release of the 1964 Plan and that to be reported in 1968. A tentative list of these is included as Appendix H. Among these is one of particular importance for future planning. It is a proposed study of fiscal procedures used by private and public colleges and universities. The need for better data on finances became clear as material was prepared for Part VI of this plan. This Part provides a brief summary of financial information and estimates of costs expected to 1970.

With the Governor's appointment of the Board of Regents as the Commission for the Higher Education Facilities Act (1963), the Office was expanded with Federal funds to provide the necessary additional staff to develop and implement the State Plan which this Act requires. This is, no doubt, just a beginning of State services to the colleges in regard to

Federal programs. The greater involvement of the Federal Government in higher education is a certainty. In planning ahead every effort will be made to simplify the relation of the colleges to the Department by keeping all of the State and Federal planning efforts concentrated in this one Office.

Looking to the future, it is obvious that the Department will have to do no less than in the past in the area of regulation and supervision to guarantee minimum standards. The colleges can expect that even the Office directly responsible for these fundamental operations will be developing also along the lines of the three new offices, namely, to stress additional service rather than regulatory supervision. Concentration will be on curriculum and instruction, including teacher education.

In fact, such new projects are already under way in the Office of Higher Education. For example, the Proficiency Examination Project, offering the possibility of college credits and of teacher certification credits on the basis of competency examinations, involves the cooperation of over 140 colleges of the State and presently enlists the services of 75 faculty members from 33 colleges and universities. An example of another cooperative project is a joint undertaking by five colleges and the Department to explore thoroughly the various recommendations recently made by James B. Conant for the improvement of teacher preparation in his report, Education of American Teachers.

The Office of Professional Education has been recently staffed to give more attention to education for the professions. Heretofore, it has been occupied almost exclusively with heavy responsibilities for developing and administering examinations for licensure and for enforcing the Education Law pertaining to the professions. Joint projects and planning conferences involving the various Boards of Examiners, the professional societies, and the professional colleges will be held to attack a variety of pressing problems in education for the professions.

The next specialized office to serve all the colleges of the State should be established in the field of science, engineering, and technology. This has been postponed up to this time because the Federal Government, through such programs as those of the National Science Foundation and the Federal Office of Education, has been giving special attention to programs at the college and university level. The State's funds have been used to complement these by supporting in-service education programs at the high school and elementary level. But the need for a special Office of Science and Technology in higher education is now pressing.

During the current year a number of institutions, organizations, committeees, and State agencies have become deeply involved and concerned about various aspects of science education and research in the State. Among these are every university and most of the colleges in the State, the State Advisory Council on Higher Education, the Advisory Council for the Advancement of Industrial Research and Development, the New York State Science and Technology Foundation, the Science Advisory Countil, the Office of Space and Atomic Development, and laboratories and research divisions of business and industry.

All of these groups could be assisted in their efforts by the Department, as experience with the other recently established specialized offices has shown. Without this there will be duplication of effort and needless expenditure of funds not only by these and similar groups but also by the colleges in responding to inquiries for certain basic data on resources, projects, programs and so forth.

A number of offices in the Department not under the Associate Commissioner for Higher Education serve the colleges and universities. Among these are the Office of Research and Evaluation and the Regents Examination and Scholarship Center. These offices have been indispensable in providing data necessary to long-range, statewide planning. In this connection, it should be pointed out that more complete information is needed on academic aptitudes and career interests of high school graduates, viewed as a total population from year to year and viewed as populations in particular regions of the State. At the present time approximately 65 per cent of all the high school graduates of the State take the Regents Scholarship Examination. This is the nearest thing in New York State to a statewide test of academic aptitude. Many other states have found it wise to establish statewide programs of testing and surveying abilities, backgrounds, and interests of high school graduates as a foundation for planning for higher education.

The Regents:

(57) Recommend that each private college and university develop by 1968 a "perpetual inventory" type of long-range plan, looking ahead at least five years for program and fiscal development.

(58) Will direct the State Education Department to make a study in cooperation with the Board of Trustees, State University of New York; the Board of Higher Education of the City of New York; and the privately controlled colleges and universities to describe more precisely and completely the fiscal procedures followed in higher education, and to determine better per-student cost figures on which to base cost estimates and comparisons.

(59) Will establish in the State Education Department at an early date an Office of Science and Technology.

(60) Will establish a periodic survey of college-going aspirations and other related characteristics of high school seniors, using fully the Regents Scholarships Examination which already reaches annually most high school seniors in the State.

5. TO GUIDE AND ENCOURAGE THE DEVELOPMENT OF NEW PROGRAMS AND INSTITUTIONS

In developing new programs and new institutions in an orderly, well planned manner, the academic community faces a paradox. The independence and sovereignty of each institution as a unit are necessary and should be fostered; the common interests and general strength of all the colleges and universities as a group or "federation of colleges" are also essential and to be furthered. Both of these desirable conditions can be preserved by adopting attitudes and taking action favorable to interinstitutional cooperation. A wise balance of regulation and control on the one hand, and stimulus and encouragement on the other, is required.

Regulation and Control

The colleges and universities comprising the higher educational component of The University of The State of New York operate with a high degree of independence under the Education Law, Regents Rules, and Commissioner's Regulations. Most of the legal sections that apply to colleges are concerned with maintaining minimum standards or with establishing policies for the State as a whole which will encourage the general improvement of programs and administration. The State Education Department, which applies these standards and policies, has regularly sought guidance and endorsement of its procedures through extensive involvement of college and university representatives on advisory councils and committees. The resulting guidelines are followed when recommendations are made to the Regents on provisional charters, on absolute charters, and when registering (approving) new curriculums leading to degrees. Furthermore, the reactions of other institutions in the area in which the petitioning college is located are sought. Leaders throughout the State are consulted whenever special problems appear.

These procedures have been informal and without reference to long range planning. This approach was adequate in the past when changes in the system were small, gradual, and relatively infrequent. More deliberate and formal procedures are now needed.

The situation has changed drastically in recent years. Higher education must be greatly expanded throughout the State, and the law provides that this be done according to long range statewide planning. Without such planning, costly duplication of program and effort will occur and needless conflicts will develop. But planning is impossible unless there is increased coordination and control over the launching of new curriculums, the expansion of new programs, and the establishment of new colleges, branches, or extension centers.

The State Advisory Council on Higher Education agrees with the Department that for the years ahead it will be increasingly important to keep all institutions well informed of the plans developed by any one of them, and that more formal procedures will be needed in the Department for handling petitions for changes. These procedures should be developed with the assistance of all sectors of higher education in the State to guarantee the strong support of the academic community. Changes in the Education Law may be needed, but they should be considered only if the colleges and universities are agreed that they are necessary.

Among the elements that should be considered for inclusion in a more formal plan for the approval of new programs and institutions would be: (a) a request from the college concerned, with a rationale for the new venture, including its own appraisal of the local and statewide situation if these are pertinent; (b) a review and report by the Office of Planning in Higher Education on the relationship of the proposed action to the current Regents Plan; (c) a preliminary decision by the Office of Higher Education after conferences with the institution and other colleges most directly concerned; (d) a review of the preliminary decision by a group representative of the public and private colleges throughout the State for advice and reaction; (e) a final decision or recommendation by the Office of Higher Education; and (f) an opportunity to appeal the Department's decision directly to the Regents. With a mechanism of this sort, fully understood and strongly supported by the boards of control and the chief executive officers of the institutions of higher education, needless duplication of facilities and efforts could be avoided, and decisions could be reached on all matters of critical importance to statewide planning. Care would have to be exercised not to create a complex and involved procedure that would greatly slow down implementation of an institution's plans for development.

With regard to incorporation or chartering of new colleges, a change in the Education Law is needed. At present, a proposed corporation need meet only a minimum financial requirement of $500,000 that was set in the law in 1892. A more realistic requirement, in view of current economic factors, would be at least twice the amount stipulated in the statute. The present amount of $500,000 would suffice for junior colleges.

Stimulus and Assistance

The procedures suggested above will have constructive aspects, but the implementation of long range plans requires a more positive approach. Long range planning can be more effective if it does not depend entirely on proposals originating with the institutions. Ways must be found to encourage and assist colleges and universities to launch or expand programs to meet critical needs of the State.

One way to do this would be through contractual arrangements with a college, private or public, which would agree to develop certain programs as a service to the State, provided that financial assistance could be given immediately and through the formative years. (See also pages 73 and 79.) If the Board of Regents, as a focal center for planning in the State, had funds available for such purposes they could move rapidly to supplement the plans submitted by individual institutions in the areas of greatest State need.

Assurance of financial help would enable institutions to expedite development of new and expanded programs as a service to the State. Sharper focus and more consistent direction would thus be given to long range planning -- a focus and direction which are essential if planning is to be effective and genuinely statewide. As the board responsible for statewide planning involving both private and public institutions, the Regents are in a position to determine the areas of greatest need and to apply supplementary funds where they would be most productive.

The Regents:

(61) Will direct the Education Department to develop a plan in consultation with chief executive officers of colleges and universities representative of The University of The State of New York, to provide guidelines and more formal procedures for the establishment under either public or private auspices of new curriculums, new institutions of higher education, new college branches, or extension centers. These guidelines and procedures should guarantee the widespread discussion and review of proposed new developments by the academic community in New York State before formal action is taken by the Regents or the Department.

(62) Recommend that the conditions of incorporation of a college, now requiring at least $500,000, be changed to $1,000,000; except that the former figure will remain for incorporation of new junior colleges.

(63) Recommend that the Legislature appropriate for fiscal 1965-66 and subsequent years the sum of $500,000 to be used by the Board of Regents to contract with colleges, public or private, for the initial development of programs in areas of critical State need, the contracts to be made on a matching basis and for a period not to exceed five years.

PART VI

THE COSTS OF HIGHER EDUCATION

Higher education will require an increased flow of resources if the colleges and universities are to accomplish the tasks which have been set forth in preceding parts. Of this there can be no doubt. More faculty and staff must be recruited and retained in the face of a nationwide scarcity. More land, buildings, and equipment must be acquired. Both operating and capital expenditures, therefore, must rise substantially during the foreseeable future.

1. EXPENDITURES

Two facts stand out when attention is directed to the pattern of current expenditures in higher education in recent years as shown in Table 10. The first of these is the rise in total expenditures from 1957-58 to 1961-62 of approximately 60 per cent. During this same period, enrollment of all types increased about 22 per cent. Thus, the expenditures for providing higher education increased about eight per cent per year, aside from the increases attributable to larger enrollments.

The second fact which stands out is the consistency with which the educational dollar is divided among the several types of expenditures, regardless of the type of four-year institution being examined. In 1961-62 the expenditures for resident instruction and research varied only between 66 and 68 per cent of the total, and the same small variations are shown in each of the other categories.

Per-Student Expenditures

It would be highly desirable to be able to report educational costs per student for different types of institutions, for different types of programs, for different levels of study, and for different types of instructional techniques. Unfortunately, only the first of these is at all possible. Table 11 indicates the approximate medians and interquartile ranges of per-student costs for different categories of institutions.

The median figures show that annual institutional expenditures per student for educational and general purposes range from $1,360 for the 31 largest private institutions to $835 for community colleges. Expenditures at both State University and City University four-year units are approximately $1,200 per student per year. Agricultural and technical colleges reflect the expenses of their technical programs by a slightly higher figure than the community colleges.

Operating Cost Projection

Estimating the levels of operating expenditure for higher education that will be needed by the end of the decade presents a most challenging problem. It is clear from the record of the past, however, that the rate of increase in expenses for operations can be expected to accelerate at least as fast as the rate of increase in enrollment. More probably, for the reasons discussed below, costs will rise even more rapidly than enrollment, as has been true in the past five years.

TABLE 10

Purposes of College and University Current Expenditures, New York State Institutions, 1957-58 and 1961-62

	Classification of Institution and Percentage Distribution of Total Expenditures			
Purpose	Private 1/	CUNY	SUNY 2/	Community Colleges
Resident Instruction & Research				
1957-58	62	74	65	61
1961-62	66	67	68	60
General Administration				
1957-58	22	11	16	20
1961-62	20	19	18	25
Plant Operation & Management				
1957-58	11	11	13	13
1961-62	10	11	12	11
Libraries				
1957-58	3	4	3	2
1961-62	3	4	3	3
Extension				
1957-58	2	1	2	4
1961-62	2	*	*	2
Total Expenditures				
1957-58				
Per cent	100.0	100.0	100.0	100.0
Amount (millions)	$303.7	$ 37.4	$ 37.0	$ 7.6
1961-62				
Per cent	100.0	100.0	100.0	100.0
Amount (millions)	$490.4	$ 53.9	$ 57.6	$ 18.1
Percentage Increase--1957-1961	61	44	56	138

* Less than 1/2 of 1 per cent.

1/ Including contract colleges at Cornell University.

2/ Excluding contract colleges at Cornell University.

TABLE 11

Educational & General Purpose Expenses
Per Full-Time Equivalent Student
New York State Institutions, 1961-62

Classification of Institutions	Median	Interquartile Range *
Four-Year Institutions		
Private (31 largest institutions)	$1,360	$ 978-2,255
State University of New York Universities and Colleges	1,180	1,087-1,315
City University of New York	1,200	1,135-1,270 *
Two-Year Institutions		
Private	1,400	1,093-2,792
Agricultural & Technical Colleges	910	846-1,436 *
Community Colleges	835	698-1,006

* The interquartile range, which is the range of the middle one-half of the distribution, is presented to show the most typical range. However, the absolute range is shown for City University of New York and the Agricultural and Technical colleges because they include only four and six institutions, respectively.

Faculty and administrative personnel are scarce relative to the demand for their services, and will become more scarce in the immediate future. Although faculty salaries rose 5.8 per cent nationally between 1961-62 and 1962-63, according to reports by the American Association of University Professors, this rate of increase is lower than the 7.4 per cent required to double salaries in a decade, as recommended by the Association. The goal of doubling salaries is supported by arguments both of equity and of necessity. Faculty salaries should be comparable to those of other professions. Moreover, substantial increases are essential if a sufficient number of able faculty and staff are to be recruited and retained in a market characterized by increasing mobility and by competition with employment opportunities outside the academic profession.

Other operating expenses will probably not be pushed upward in the near future at the same rate as salaries. However, price increases in the general economy would affect the goods and services used in education, and the high level of demand may make these increases particularly common in higher education. If the rate of increase of the past five years, eight per cent a year, were to continue to 1970-71, the result would be a doubling of the expenditure for instruction per student from 1961-62 to 1970-71. It may be reasonable to assume that part of this will be offset by increased efficiency, with the result that the cost of instruction per student may be approximately 50 per cent higher in 1968-69, and two-thirds higher in 1970-71, than in 1961-62. Of course, a still greater rise in efficiency will reduce the per-student cost.

Thus, it is estimated that statewide institutional operating expenses for educational and general purposes, other than separately budgeted research, will rise from approximately $550 million in 1961-62 for approximately 476,000 full- and part-time students, to more than $860 million in 1968-69, and to $1 billion in 1970 for approximately 800,000 full- and part-time students. Table 12 shows the approximate cost estimated for different categories of institutions. Failure of support for any one category will place an increased burden on the others and, in fact, may require disproportionately larger outlays for unplanned responsibilities which must be assumed under emergency conditions or in response to unexpected failures.

It must be emphasized that these expense estimates do not include all outlays which colleges and universities may make, but are limited to educational and general expenses. Major exclusions are expenditures for separately budgeted research and for dormitory and food service operations. Furthermore, there has been no attempt to include any extra expense due to wholly new programs which are more costly per student than present programs. In brief, these cost estimates reflect two sources of increase: the larger enrollments expected; and the increased cost of securing faculty and other educational services, and rising operating costs of facilities.

The figures shown here for State University are presented on a different base than the $356.3 million estimated to be needed in State

TABLE 12

Estimated Educational and General Expenditures, New York State Institutions, 1968-69 and 1970-71*

Classification of Institutions	Estimated Expenditure (millions) 1968-69	1970-71
Four-Year or more		
Private (including contract colleges)	$451.0	$ 524.0
Public		
CUNY	148.0	188.0
SUNY (excluding contract colleges)	137.0	172.0
Two-Year		
Private	13.0	18.5
Public		
Agricultural and Technical Colleges	15.0	18.5
Community Colleges		
New York City	35.0	43.0
Other	63.0	86.0
	$862.0	$1,050.0

* This estimate is based on estimates of increases in enrollment and in cost per student as described in the text. No change is assumed in the present ratio of part-time to full-time students or in their distribution among institutions.

appropriations in 1970-71 as reported in State University's 1964 Master Plan. A reconciliation would require that the figures in Table 12 for both two- and four-year institutions be supplemented by estimates for the contract colleges (listed here with private colleges), new programs, new institutions, and the costs of separately budgeted research. It is believed that the result would not differ markedly from State University's estimate. Similarly, the estimate made here for City University makes only conservative allowances for the increased costs of new, higher level, and special programs planned or likely to be instituted.

These, then, are the costs which must be met if the citizens of the State of New York wish to provide the level of higher education that this Plan has outlined.

Capital Expenditures

A survey of all private institutions by the Office of Planning in Higher Education reveals contracts let or firm commitments made for construction totaling $379 million for the period from 1964 to 1970, with a concentration in the period from 1964 to 1967. Of this amount, $274 million is for classrooms and laboratories. The remainder is for libraries, office space, campus centers, auditoriums, dormitories, and related facilities. In addition, possible construction totaling $280 million had been seriously considered but no commitments made by the time of the survey. State University of New York has under way a facilities expansion program which is expected to cost approximately $1 billion by 1970, and City University of New York has proposed additional facilities costing between $240 million and $270 million in the next six years. Expansion of the community colleges to reach 1970 enrollment goals will require some $300 million for construction.

Outlays of these magnitudes are made necessary, in part, by the sheer numbers of qualified students who are expected to seek enrollment within the State. In part, the expenditures are required to catch up with the physical requirements for a college and university education of acceptable quality. Many institutions have been operating with facilities wholly inadequate for the quantity and quality of education they seek to offer. Finally, the outlays are needed to supply the facilities in future years to progress toward the goal that all who have the potential and desire for post-high-school education in New York State will be served.

It will be increasingly important during the quadrennium of this Plan to achieve careful coordination of facilities expansion scheduled to take place after 1968. From 1964 to 1968 a rapid increase in the amount and quality of facilities in the private institutions, State University, City University, and the community colleges will be absorbed promptly by expanding enrollments. However, the demonstrably slower rate of expansion after 1968 will make any miscalculation of the quantity, type, or location of new facilities both more obvious and more wasteful. This could result from unilateral action by a college or university.

2. CURRENT INCOME

A brief analysis of current income will give a more complete picture of the finances of higher education. Data basic to this analysis are shown in Table 13. It shows the differences in income sources between kinds of institutions, and the changes in income sources from 1957 to 1961.

Student fees were the largest single source of income for private institutions, but constituted only 42 per cent of the total. This proportion remained the same over the five-year period, even though total income rose 62 per cent. The rise in tuition charges (see Figure 11, page 56), therefore, should not be interpreted as a relaxation of efforts by colleges to secure funds from other sources. Although not shown by data in Table 13, many smaller private institutions receive a much higher percentage of their income from tuition and fees. These institutions are quite numerous but enroll relatively few students as compared to the larger private institutions, which have a greater influence on the figures reported.

Public sources supplied the second largest amount of income for private institutions in both years. Funds from public sources include all payments from government sources (local, State, Federal) and payments toward current institutional expenses including contract research, but do not include local, State, or Federal payments to students for scholarships, loans, or other types of student aid.

Income at units of State University, excluding the contract colleges and the community colleges, rose 55 per cent during this period. The apparent large rise in the percentage of income from "other sources" is more a change in reporting techniques than a change in income sources, although some of the latter did occur. It is to be expected that data for 1963-64 and subsequent years will show a larger proportion of income arising from student fees because of the establishment of a uniform tuition policy in State University. While complete figures are not yet available, it is estimated that tuition and fee income may reach 25 per cent of the total income for State University. However, this income, under present legislation, is earmarked for debt service on the securities being issued to finance the construction of facilities needed by State University.

At City University income has increased approximately 43 per cent over the period, but with no particular changes in the sources from which it was drawn. Student fees constituted 16 per cent in each year and public sources made up almost all of the remainder.

The community colleges reported the largest percentage rise in income in the period under study. The 122 per cent increase reflected the increase in the number of community colleges and in their enrollment. However, the relative sources of income remained almost constant between 1957 and 1961 at approximately 40 per cent from student fees and 60 per cent from public sources.

TABLE 13

Sources of College and University Income, New York State Institutions, 1957-58 and 1961-62

Source of Income	Classification of Institution and Percentage Distribution of Total Income			
	Private Coll. & Univ. 1/	CUNY	SUNY 2/	Community Colleges
Student Fees				
1957-58	42	16	9	42
1961-62	42	16	7	40
Endowment Earnings				
1957-58	11	*	*	*
1961-62	8	*	*	*
Gifts and Grants				
1957-58	11	*	1	*
1961-62	10	*	2	*
Public Sources				
1957-58	18	84	88	58
1961-62	25	81	80	60
Sales and Service				
1957-58	9	*	1	*
1961-62	8	2	*	*
Other Sources				
1957-58	9	*	*	*
1961-62	7	*	11	*
Total Income				
1957-58				
Per cent	100.0	100.0	100.0	100.0
Amount (millions)	$312.2	$ 38.4	$ 38.2	$ 8.3
1961-62				
Per cent	100.0	100.0	100.0	100.0
Amount (millions)	$504.3	$ 55.0	$ 59.2	$ 18.4
Percentage Increase --1957-1961	62	43	55	122

* Less than 1/2 of 1 per cent.

1/ Includes contract colleges at Cornell University.

2/ Excludes contract colleges at Cornell University.

Source: Compiled from the College and University Financial Reports submitted to the State Department of Education.

Implications for Planning

Needed expansion of higher education in New York State will require measures to stretch revenues. Some of these may be repugnant and contradictory to cherished traditions, but such possibilities as more efficient schedules and longer academic calendar, better use of plant, increased inter-institutional cooperation and collaboration, mergers of institutions, specialization within the merged system, and even some absorption of one college by another, may be wise and necessary.

New educational technology offers a partial solution of the problems of rising numbers and rising costs per capita. Every effort should be made to take advantage of technological progress whenever improved results are probable. However, proposed innovations often are slow to achieve technical feasibility for every-day use and are even slower to achieve wide adoption. Impact on costs during the four years covered by this Regents Plan is not expected to be significant. A sober examination of the cost-reducing possibilities of new techniques points to the conclusion that their most common result will be the substitution of one type of cost for another, with some economy rather than a large reduction of expenditures.

3. CAPITAL FUNDS

Over the years the citizens of New York State have made a huge investment in physical facilities for higher education. The total value of these holdings reported in 1963 was approximately $2.0 billion (see Table 21, Appendix E) of which over $1.35 billion is held by private institutions, approximately $400 million by State University, approximately $80 million by City University (four-year units), and about $65 million by the community colleges. The striking fact is that by 1970, expenditures planned for capital development by all colleges and universities will require more dollars than the total value reported for all of the facilities now in existence.

The capital expenditures which will be required by the end of the decade clearly would place a severe burden on the people if financed from current income, either through taxation or contributions. This is a long-range investment in facilities, which in turn will contribute to lasting improvements in higher education.

In part, of course, this outlay is needed to enable State University of New York to achieve its objectives and full scope of services, an expenditure made larger by the relative recency of the University's establishment. Throughout much of their history, the central and western states have been building public institutions offering comprehensive programs. New York, like most of the states of the New England and Eastern Seaboard, has not followed this course, but until recently relied very heavily upon private institutions. In 1948 the State committed itself to building a State University to help meet its needs.

A related commitment which the State has long had but which also will require increased funds is the contribution toward the capital expenditures of City University. Modernizing and expanding facilities for undergraduate and graduate programs will be expensive but necessary.

If the plans of private institutions are to be realized, and if they continue to rely on contributions and to a lesser extent on current income for capital expenditures, these resources will be strained to the utmost. The institutions may be forced to undertake programs of borrowing in order to finance their anticipated outlays for capital facilities. The already sizable program of the State Dormitory Authority to finance, construct, and equip all types of college buildings is witness to this fact (see page 8). Careful planning will be vital because the need for funds for amortizing costs of facilities may be competing with the need for funds for costs of operations. Insufficient revenue to meet both kinds of outlays would place an institution in fiscal difficulty.

The recent enactment by the Federal government of the Higher Education Facilities Act offers some assistance to public and private colleges in the financing of certain types of physical expansion. As currently written, the legislation provides approximately $19 million a year to New York State to be allocated to projects of colleges and universities, according to a State Plan administered by the Regents in accord with regulations of the Federal Office of Education. Funds of this amount, welcome as they are, will not go far toward meeting the physical expansion requirements of higher institutions in the State of New York.

Borrowing by public institutions in order to finance capital outlays seems well established in most states. Amortization of the cost of revenue-producing facilities from revenue earned also seems well established. The present practice in New York State of earmarking revenues from State University student tuition payments for the amortization of capital expenditures is contradictory to the accepted theory and practice in most other states. The facilities being built at the various institutions are part of the capital assets of the State of New York, and it would seem preferable for their amortization to be provided from the general revenues of the State. Thus, student tuition and fees, which fluctuate with the number of students being taught, would be available as one source of funds for current operating expenditures, which also fluctuate with the numbers being taught.

4. NEW YORK'S ABILITY TO PAY

New York State is being called upon to make higher education available to more students, for a longer period of time, and, hopefully, at a higher level than ever before. The successful accomplishment of this task will require more funds by far than have ever been required in the past. Fortunately, however, a prosperous society will simultaneously be generating additional personal income which can be devoted to this and other kinds of outlays. Although the absolute number of dollars required will be setting new records each year, there will be an increased flow of income from which they may be secured.

That expenditures for higher education neither have been nor will be an unreasonable burden is evident when they are related to current personal income. Table 14 shows recent relationships between personal income in the United States and in New York State, New York higher educational expenditures, and the relationship between those expenditures and New York State personal income. In 1961 New York State spent only 1.28 per cent of personal income for higher education. The rapid growth of educational expenditures from $385.8 in 1957 and $620 million in 1961 was partially offset by the growth of New York State personal income from $41.2 billion to $48.6 billion in 1961. Thus, higher educational expenditures as a percentage of New York State personal income grew only about one-third of one per cent from 1957 to 1961.

The last two lines of Table 14 provide an approximation for 1968 and 1970 of the relationship between educational expenditures in New York State and personal income to be anticipated. These years were selected because they mark, respectively, the date for the next Regents Plan and the end of the decade. If it is assumed that personal income will grow in the nation and in the State approximately as it has in recent years and operating expenses are estimated as stated, then in 1968 approximately one and one-half per cent of personal income would be required for higher education. By 1970 the relationship would call for approximately one and three-fourths per cent of the personal income earned by New York residents. The relative increase necessary to meet the requirements of 1968, in fact, is less than the relative increase which was required and met between 1958 and 1961.

The Empire State has never shirked its responsibility to support the best in education for its people. It has a national and worldwide reputation for the excellence of its educational program. Good as this has been, it is not adequate for the years ahead. The Board of Regents looks confidently to the future for continuation of action by the Governor, the Legislature, and the people at large that brought this reputation to New York State.

TABLE 14

Personal Income and Expenditures for Higher Education

	Personal Income			N. Y. Educ. Exp.	
Year	U. S. (Billions)	N. Y. (Billions)	N. Y. as a % of U. S.	Millions of $	% of N. Y. Personal Income
Actual					
1954	285.3	34.2	12.0	NA	NA
1955	306.6	36.5	11.9	NA	NA
1956	330.4	39.0	11.8	NA	NA
1957	348.7	41.2	11.8	385.8	0.94
1958	357.5	42.1	11.8	425.5	1.01
1959	381.3	45.2	11.9	471.7	1.04
1960	399.0	46.8	11.7	550.9	1.18
1961	415.0	48.6	11.7	620.0	1.28
1962	439.7	51.0	11.6	NA	NA
1963	463.4 p	53.1 p	11.5	NA	NA
Estimated					
1968	560.0	64.4	11.5	1002.0 *	1.56
1970	600.0	69.0	11.5	1200.0 *	1.74

p Preliminary

* Estimated costs shown above are the costs shown in Table VI-4 plus estimates of $140,000,000 in 1968 and $150,000,000 in 1970 for separately budgeted research. These must be included for comparability with sums for educational expenditure in earlier years.

PART VII

SUMMARY AND PERSPECTIVE

The Regents 1964 Plan touches upon all levels, sectors, and all major aspects of higher education in accord with the general provisions of the 1961 legislative act which established requirements for continuing statewide planning. This comprehensive treatment of higher education in a state as large and complex as New York resulted in a Plan that is extensive and complex.

To provide a summary and perspective of the Plan, Part VII highlights and states briefly: (1) the guiding principles which are apparent throughout the Plan, (2) the needs in higher education, and (3) the anticipated results from implementation of the Plan. Section (4) presents the Regents proposals and recommendations.

Schematically, the institutions of higher education, organizations, services, and their interrelationships are shown in Figure 12.

1. PRINCIPLES

Certain fundamental themes run throughout this report. They had constant influence on the specific proposals and recommendations because they are general principles which the Regents believe should guide the expansion of higher education in the State. The guiding principles of major importance are:

(a) The main direction of higher educational development should be toward increased service to help individuals reach fulfillment of their talents, interests, and ideals; to strengthen the economy; to advance knowledge; and to help the State keep a position of leadership in the nation and the world.

(b) The University of the State of New York under the Board of Regents provides a legal and operational federation of colleges and universities, a structural advantage in higher education unique in the nation.

(c) Society cannot afford the waste of human resources represented by the present gap between college attendance and college ability in New York State.

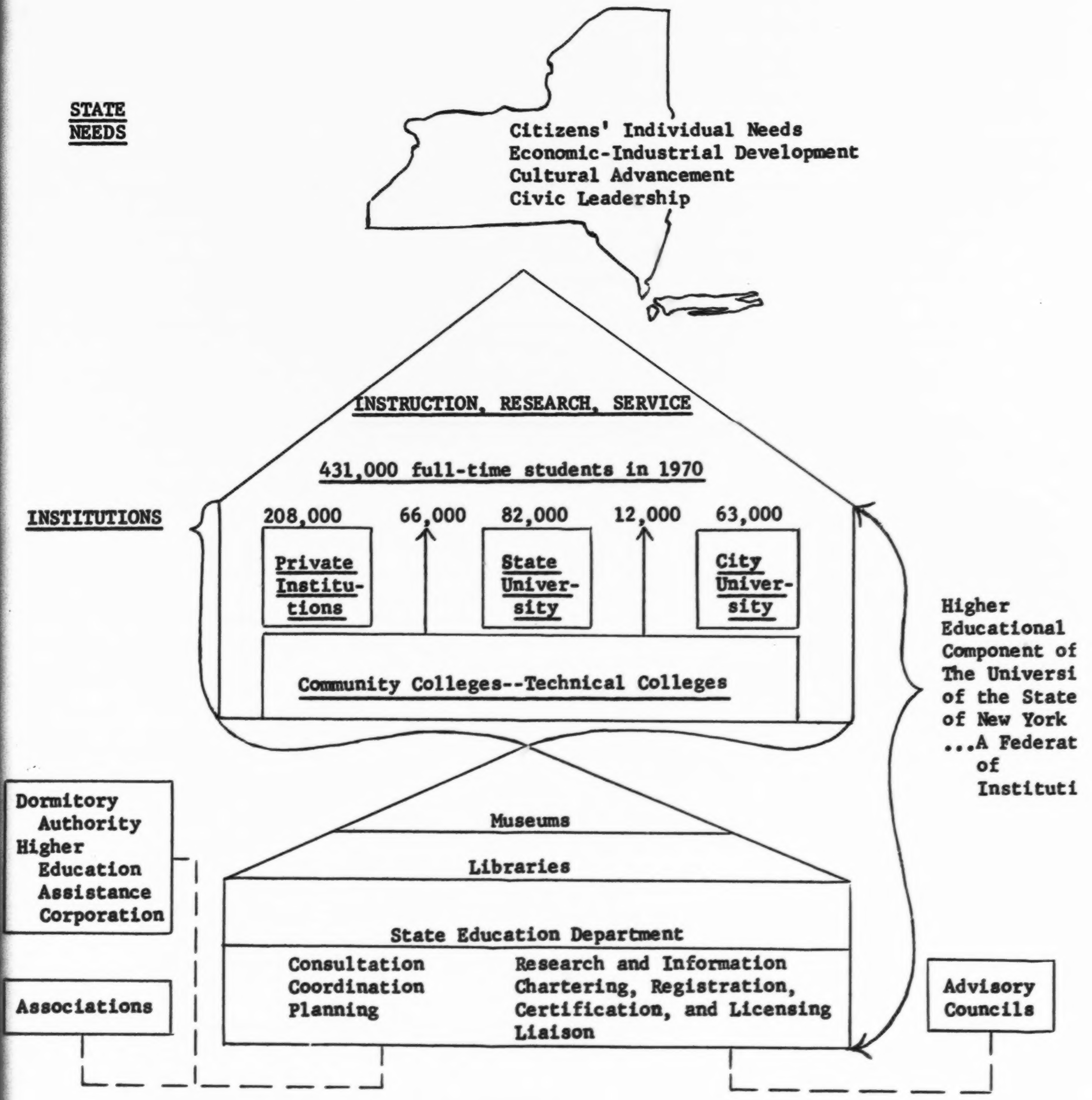
(d) Opportunity for college study should be readily accessible at all levels to students throughout the State, and students should be able to choose the colleges and programs on grounds other than the costs they would incur.

(e) Quality of educational service is an essential in every type and level of post-high-school program.

(f) Enrichment of educational programs is possible in many ways and through many resources, but particularly by use of the State's excellent museums, libraries, and related cultural centers.

Figure 12

NEW YORK STATE'S COMPLEX OF HIGHER
EDUCATIONAL NEEDS, SERVICES, AND INSTITUTIONS
(A Schematic Description)


STATE NEEDS
Citizens' Individual Needs
Economic-Industrial Development
Cultural Advancement
Civic Leadership
INSTRUCTION, RESEARCH, SERVICE
431,000 full-time students in 1970
INSTITUTIONS
208,000
66,000
82,000
12,000
63,000
Private Institutions
State University
City University
Community Colleges--Technical Colleges
Higher Educational Component of The Universi of the State of New York ...A Federat of Instituti
Museums
Libraries
State Education Department
Consultation
Coordination
Planning
Research and Information
Chartering, Registration,
Certification, and Licensing
Liaison
Dormitory Authority
Higher Education Assistance Corporation
Associations
Advisory Councils

(g) For economy and efficiency of higher educational operations, the full use of all available resources, private and public, is mandatory.

(h) Cooperation among colleges and universities will help conserve scarce resources as well as improve the effectiveness of their programs of instruction, research, and community service.

(i) Planning in higher education is a continuing and constant effort and the foundation for orderly, coordinated, constructive development for the future.

2. NEEDS

The magnitude of the task ahead is a reflection of rising numbers in the population, rising aspirations of the people for college experience, and rising educational requirements for effective living in a modern economy and society.

The first need is to develop the means to serve the 431,000 full-time students (including undergraduates and graduates) who are expected to enroll in the colleges of the State by 1970. Within this achievement must be included the variety of programs necessary to prepare four special and overlapping groups -- college-age youth, older adults seeking to further their education, women, and members of culturally deprived segments of the population -- to take new and productive places in society.

Within the total expansion of higher education there must also be increased emphasis on instruction and research at the graduate level. Upon the quality of graduate education rests the quality of all education through discovery of new knowledge and production of the faculty for the colleges and teachers for the lower schools. Graduate education, especially at the advanced doctoral level, also maintains the quality of research, development, and production in industry, business, government, and the professions. Weaknesses in graduate education, therefore, produce cumulative deficiencies of far-reaching consequences.

Finally, there is need to lower the barriers to educational opportunity beyond the high school. A constant attack on these is necessary, be they the costs to students or parents, the geographic inaccessibility of colleges in relation to students' homes, or the limitation of choices in college curriculums when compared to the wide array of student interests. The ideal objective is to reach the full potential estimated to be between 480,000 and 612,000 by 1970, as compared to the 431,000 actual full-time enrollment expected at that time.

3. ANTICIPATED RESULTS

The higher educational component of The University of the State of New York, which embraces all higher educational institutions in a federation of colleges and universities, provides both an operational and legal framework through which efforts can be concentrated, problems can be attacked, and expanded services can be planned. By interrelating all the institutions, whether under private or public control, and by drawing on all their resources, the Regents Plan, if fully implemented, will enable the State to meet its needs through 1970. Such implementation will require action by the private colleges, State University, City University, the community colleges, the voluntary higher educational associations, the State Education Department, the Board of Regents, and the Legislature and Governor.

Over-all Results

Major developments of statewide importance will be:

(a) There will be enough places in the colleges and universities within New York State to accommodate the estimated full-time enrollment of 431,000 students by 1970.

(b) While for many reasons (many of them cultural and social and others economic or educational) the full college-going potential in New York State's population (between 480,000 and 612,000) will not actually be attending college in 1970, significant progress toward this ideal will have been achieved.

(c) There will be an over-all equality of opportunity and a reasonable freedom of choice between attendance at public or private institutions and between different institutions in each category.

(d) A good quality of education will be provided for each qualified student seeking to further his education beyond high school.

(e) There will still remain serious shortages of trained manpower with specialized talent in several fields, such as in the health science professions and technologies, but additional measures to lessen these shortages will have been taken.

(f) The critical shortage of college faculty will have been faced and initial steps to overcome resulting weaknesses will have been taken.

(g) The range and depth of services in the nature of consultation, research, and information, planning, coordination, and other special assistance provided to colleges and universities of the State by the State Education Department will be materially greater.

(h) University centers of excellence as stimuli and service agencies in scientific and technological instruction and research to strengthen the State's industrial and economic development will be stronger and more numerous.

(i) A more complete utilization will be made of the many diverse resources in higher education, including not only the colleges and universities, but also the libraries and museums; moreover, steps toward linking these multiple resources with each other by television and other new technical schemes will have been taken.

Impact on Institutions

Beyond these achievements this Plan will produce other constructive results which bear specifically on each of the major sectors of higher education in the State.

Private Institutions

This Plan will enable the private colleges and universities (representing an investment of approximately $1.5 billion in physical plant and $0.5 billion in annual operations) to continue their historical service to the State and to extend it in several important ways.

(a) The diversity of private higher educational institutions in terms of size, types of program, control, and constituencies served will be preserved.

(b) Colleges seeking to serve larger numbers of students with a broader range of interests and talents will be encouraged.

(c) Graduate programs and professional schools will have increased capacities to produce needed highly trained personnel.

(d) Faculty for instruction at all levels and for research will be strengthened.

(e) Inter-institutional programs to conserve human and material resources in short supply will be expanded and increased.

(f) Institutional long-range plans will be in greater use as foundations for sounder development of these colleges and as bases for greater efficiency in academic and administrative operations.

State University

Implementation of this Plan will enable State University of New York to progress noticeably toward its triple goals of unity, identity, and excellence.

(a) The University's structure will more fully recognize differentiated functions of University Centers, General Colleges, and two-year technical colleges and community colleges.

(b) Increased University autonomy within the over-all framework of State government will expedite improvement in institutional operations and academic programs.

(c) Graduate studies, research productivity, and the number of professional schools will be increased.

(d) Libraries, laboratories, and other needed instructional resources will be more complete throughout the University.

(e) A better geographic distribution of four-year colleges and two-year colleges will be in evidence.

(f) Internal communications for both administrative and academic purposes will be strengthened.

City University

The Plan, further, will enable City University of New York to continue its growth in providing opportunity to the people of New York City and to develop with distinction.

(a) The number of students served will be increased materially.

(b) Graduate programs, professional schools, and research productivity will be increased.

(c) The University will have better means to recruit and retain qualified faculty for all of its units and for different levels of instruction and research.

(d) Experimentation and research programs related to problems of the large urban center will be expanded.

(e) Involvement of the University in programs of cooperation with other colleges and universities and with related cultural centers will continue at an accelerated pace.

(f) Physical facilities, especially those needed for graduate instruction and research, will be more adequate.

(g) A sounder method of providing State aid for both operating and capital development purposes will be effected.

Community Colleges

Community colleges by this Plan will become stronger instruments for democratizing educational opportunity beyond the high school and, collectively, a more complete educational foundation to support the junior-senior and graduate programs of other higher educational institutions.

(a) The local control by boards of trustees of these institutions will be clarified and strengthened.

(b) A clearer public understanding will emerge of the educational task to be performed by the public community colleges in relationship to other levels of formal education.

(c) Improvements will be effected in the procedures followed in financing community colleges, especially in matters relating to "charge backs" to home counties of students enrolled.

(d) Curriculums will be made more comprehensive, and guidance and counseling services to students more adequate.

(e) These colleges will be enabled to turn out more technicians and semi-professional workers and in more fields. Moreover, their role in doing this will be better coordinated and articulated with local school vocational education programs.

(f) An attack will be launched on the critical problem of acquiring the needed number of community college instructors, especially those in occupational fields of study.

(g) Community college programs will be coordinated more fully with those of the technical colleges of State University.

4. REGENTS' PROPOSALS AND RECOMMENDATIONS

Proposals and recommendations advanced by the several interested sectors of higher education in New York State are presented and discussed in Parts IV and V of this Plan. Those which appeared in the Master Plans of State University and City University, approved by the Regents for submission to the Governor and the Legislature, are already listed in Part IV, pages 34-46. For convenience of the reader, the additional proposals and recommendations by the Regents, presented earlier in the different sections of Part V, are all listed below.

To Meet the Needs of Individuals, the Regents:

(1) Set as the goal for 1970 a statewide enrollment of approximately 431,000 full-time undergraduate and graduate students. Within this figure the private colleges are expected to enroll 208,000, State University and the public community colleges together, about 160,000, and City University, approximately 63,000 students. (The figures for the two public universities agree with target figures set forth in their 1964 Master Plans.) (p. 47)*

(2) Recommend that all institutions which have not done so already make plans for more efficient utilization of facilities and faculties. High priority to such plans is essential to the achievement of statewide enrollment goals and to higher quality performance. (pp. 49-50)

(3) Will prepare and publish annual revisions and extensions of projections of enrollment for all categories of students and types of institutions to assist future planning by State University, City University, and the private institutions. (pp. 49-50)

(4) Recommend that State University of New York examine its policies on student admission and the provision of institutional facilities, especially dormitories, in the light of currently available data on geographic mobility. Announcement of a definite policy by State University is necessary for regional planning on the part of other colleges and universities. (pp. 51-53)

(5) Recommend that State University develop plans for expanding enrollment in community colleges by greatly increasing regular day work-study and other programs which make post-secondary education available to recent high school graduates and adults who would not otherwise be reached. (pp. 53-61)

(6) Recommend that private four-year colleges and universities which have unfilled places for new students at junior-year level give full information to the community and junior colleges. Such information should include number of vacancies and the procedures for student transfer with minimum loss of time and energy. (p. 57)

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*Pages in parentheses refer to related portions in the text.)

(7) Recommend the establishment of a program of "Regents Junior Year Transfer Scholarships" for community and junior college transfer students who demonstrate superior promise for continued college study while attending community colleges or privately controlled junior colleges. (p.57)

(8) Recommend to City University and State University that in planning for any new baccalaureate degree institutions, further consideration be given to the creation of upper-level colleges. These colleges start at the typical junior year and continue through the master's level in suitable academic fields. (pp. 53-57)

(9) Recommend that the Legislature return to the principle of fixing the number of RegentsCollege Scholarships to be awarded each year as a percentage of total high school graduates to avoid discriminating against the able students of the future who will be members of larger graduating classes. (p. 61)

(10) Will seek adjustments periodically in the amounts awarded under the Regents College Scholarship, the Scholar Incentive Program, and other assistance to students. This is necessary to keep student aid realistically related to the costs which students and parents must bear to elect programs and colleges of their choice. (p.61)

(11) Recommend that the Scholar Incentive Program be extended immediately to include student nurses in registered nurse programs at hospital schools of nursing. (p. 61)

(12) Will direct the State Education Department to make a special study of the programs and costs carried by students entering other types of specialized post-high-school institutions (business schools, single-purpose technical schools, etc.) to determine whether the Scholar Incentive Program should be extended to include additional specialized institutions. (p. 61)

(13) Recommend that State University and City University for institutions within their respective systems clarify and describe procedures to facilitate placement and transfer of students, and make this information available to all other interested institutions. (p. 60-61)

(14) Recommend that City University move rapidly to strengthen the faculties and programs of the Schools of General Studies (programs now for late afternoon and evening study), emphasizing their function of providing upper-division work for transfer students from community and junior colleges. (pp. 60-61)

(15) Recommend that all higher educational institutions improve their services to the culturally deprived by using the plan for institutional self-evaluation and the guidelines as formulated by the College Committee on the Disadvantaged appointed jointly by the Association of Colleges and Universities of the State of New York and the Commissioner of Education. (p. 61)

To Meet the Needs of the Economy and of the Society for Specialized Manpower, the Regents:

(16) Recommend that all institutions of higher education which are expanding to help meet the State's manpower needs, build on already established strengths or pay special attention to the foundations laid before new programs of expansion are undertaken. (pp. 72-73)

(17) Recommend that leadership in the private two-year colleges seek to develop a greater balance between transfer and occupational curriculums. This should be undertaken especially by those colleges which serve constituencies that in interest and talent are representative of the general population. (pp. 69-70, 74-75)

(18) Recommend that community and junior colleges expand their counseling and guidance services, with particular emphasis on occupational selection and training. (p. 70)

(19) Recommend that the private colleges seeking to expand occupational programs review carefully the opportunities that currently exist for Federal financial assistance for programs to develop technicians and semi-professional workers. (p. 75)

(20) Will direct the State Education Department to study the special costs faced by high school graduates who enter post-high-school occupational programs and to determine the feasibility and desirability of helping students to defray the costs. (pp. 70, 75)

(21) Will appoint a special committee representing the four major sectors of higher education in the State to prepare a plan for increasing the supply of trained community and junior college instructors in occupational fields. (p. 70)

(22) Will direct the State Education Department, in cooperation with State University, to give attention to the needs for in-service training of community and junior college instructors in occupational fields. These instructors should be helped to engage in organized periods of study to improve their effectiveness as college teachers. Persons with strong backgrounds of experience in technical and semi-

professional work but with limited academic training should be aided in overcoming this deficiency. (p. 70)

(23) Will continue to encourage an articulated and coordinated development of both area vocational programs under local public school auspices and community college programs leading directly to employment as technicians and semi-professional workers. The State should continue to make full use of all available resources for preparing technicians and semi-professional workers, and such complete utilization should emphasize coordinated planning and development at both local and State levels. (p. 75)

(24) Recommend that the Education Law be amended to permit public two-year colleges to offer programs of less than two years' duration as regular day offerings when these programs meet the needs of persons who have graduated from high school or are beyond the usual age of high school attendance. (p. 70)

(25) Will direct the State Education Department, in cooperation with State and City Universities and the Association of Colleges and Universities of the State of New York, to review present practices of all institutions offering extension services and to develop a statewide plan to expand, coordinate, and make effective use of extension programs. (p. 76)

(26) Will review periodically the number of graduate fellowships authorized in New York State and the level of stipends provided for these fellowships to determine improvements made necessary by changing economic and educational conditions. (p. 73)

(27) Recommend that the Trustees of State University and the Board of Higher Education of City University give special attention to steps which would integrate specialized institutions with those which are more comprehensive in scope. Special purpose colleges both at undergraduate and graduate levels which do not have clear operating relationships within general purpose centers of instruction and research should be discouraged. (p. 73)

(28) Will request the Legislature to authorize funds for a feasibility study of the establishment of a cooperative computer facility beyond the resources of any one institution to acquire, this facility to be used to strengthen graduate education and research. (p. 74)

To Strengthen Institutions, the Regents:

Faculty

(29) Will direct the State Education Department staff in Higher Education to give special attention during the coming year to the impending shortage of new college teachers and to encourage and assist appropriate groups in taking steps to offset this emergency, including the following:

Consult with the Council of Graduate Deans and the Council on Higher Education on ways in which the time lapse between the bachelor's degree and doctorate may be shortened; take all possible steps to implement any feasible plan that can be developed.

Review and report to the Regents on the desirability and feasibility of the suggestion that a new degree be created short of the Ph.D. but involving a well-conceived new program of research and study.

Consider ways in which retired professors could be encouraged and assisted to continue to serve.

Give special attention to the recent report of the Governor's Committee on the Education and Employment of Women and to seek the Committee's further advice and assistance in respect to college instruction.

Organize a coordinated effort by colleges and interested civic groups to activate in each major region of the State a "college faculty resources registry" -- a directory listing of qualified personnel interested in part-time employment as college teachers. (pp. 78-79)

(30) Explore with college administrators and representative faculty members possible ways to identify prospective college teachers early in their undergraduate programs and to encourage them in reaching their objectives. (p. 79)

(31) Recommend the establishment by the Legislature and Governor in 1965 and subsequent years of legislative support for a program of distinguished visiting professors at undergraduate colleges. (p. 79)

(32) Recommend that groups of colleges and universities that have close geographic and other ties develop interinstitutional cooperative programs and joint use of resources, human and material, to further the scope of their services to students and to the State. (p. 79)

(33) Will continue to support any additional legislative action needed to give State University the autonomy of administrative operation typical of the strongest state universities in the country. (p. 80)

Recommend that the following changes in the Education Law relating to community colleges be enacted:

(34) Abolish the provision authorizing establishment of a four-year community college. (pp. 81-82)

(35) Provide that after a local sponsoring agency acts to establish the first community college in a given geographic area, the same agency must also be the sponsor of all later community college developments in that area. (pp. 81-82)

(36) Clarify the realms of administrative jurisdiction and responsibility of the local sponsoring agency and the local boards of trustees of community colleges so that only the latter controls institutional operations such as the development of the budget, qualifications of staff, and specifications of physical plant equipment as well as matters of program development and instruction. (pp. 81-82)

(37) Provide that, when a student leaves his home area where a community college exists, to attend one located elsewhere and enrolls in a program offered by the community college in his home area, no "charge back" to the area of residence should be levied. Provide further that exception to this general rule can be made for individual students if approved by the board of trustees of the community college in the student's area of residence. (pp. 81-82)

(38) Establish another "charge back" to apply to costs incurred by a local supporting area for capital development and purchase of major equipment, with provisions similar to those relating to operating expenses. (pp. 81-82)

(39) Recommend that the Board of Trustees of State University give further study to advantages and disadvantages of dormitories at community colleges. (pp. 81-82)

(40) Recommend that State University be given encouragement and support in strengthening its program of institutional research and fact finding to improve both its own understanding and to aid in public interpretation of such matters as characteristics of the student body, faculty supply and demand, and fiscal needs for current operations and capital outlay. (pp. 80-82)

(41) Will direct the State Education Department in cooperation with City University to study the merits of amending the Education Law to remove the identification of City University with the New York City public schools. (p. 81)

(42) Have requested the Commissioner of Education, in consultation with the President of State University and the Chancellor of City University, to recommend a course of action for clarifying the State's relationship to City University for the consideration of all interested parties not later than December 1, 1965. (p. 81)

(43) Recommend that the Education Law be amended to authorize State appropriations for current operations to City University to be made on a current rather than a reimbursement basis. (p. 81)

(44) Recommend that the Education Law be amended to give a continuing statutory basis to the present legislative practice of providing from State appropriations payments to New York City to assist it to meet costs of physical facilities for higher education. (p. 81)

(45) Recommend that the Education Law be amended to authorize payments from State monies to City University for use in paying half the cost of construction of physical facilities as opposed to half the cost of debt service for higher educational capital development, as is now the case. (p. 81)

(46) Recommend that consideration be given to making payments for construction costs to the Board of Higher Education rather than to the Board of Estimate of the City of New York so that the University can participate more fully and flexibly in the programs of the State Dormitory Authority and the Higher Education Facilities Act of 1963. (p. 81)

(47) Recommend that there be developed an equitable over-all formula for determining the State appropriation to City University, including graduate education, and that this formula be advanced as an amendment to City University's Master Plan by 1966. (p. 81)

New Approaches to Teaching and Learning

(48) Recommend that all New York colleges and universities promote the practice of granting advanced credit in those fields for which proficiency examinations have been passed, regardless of whether the competence of the student was developed through formal instruction or through independent study. (pp. 84-85)

(49) Will expand the number of fields of studies for which State Education Department proficiency examinations are available as rapidly as possible, with priority given to such courses as anthropology, business, professional education, and statistics. (pp. 84-85)

(50) Recommend that institutions serving large enrollments or offering complex, advanced programs, plan as rapidly as possible to develop on-campus educational facilities (closed circuit or 2500 megacycle transmission). (pp. 84-85)

(51) Recommend that individual institutions (public and private) consider the development of a "college communications center" and programs of training of faculty in the use of all parts of such a center. These centers facilitate a coordinated and complete use of educational communications materials and equipment, such as radio, television, programmed instruction, library resources, and computer-related instructional aids. (pp. 84-85)

(52) Will continue their efforts to secure a statewide educational television network in cooperation with State University, other colleges and universities, and the educational television councils. (pp. 84-85)

(53) Recommend that all colleges and universities, private and public, which have not yet done so, intensify their studies, experimentations, and actions to establish year-round operations, and in doing so examine not only the mechanics involved but also ways to provide a full range of programs throughout the year. (pp. 84-85)

Libraries

(54) Recommend establishing a statewide system of regional reference and research libraries along the lines described in the Regents special committee report of 1961; this should be set in motion by a pilot project for which the Regents have requested funds from the Governor and Legislature for 1965-66. (pp. 86-87)

Museums

(55) Recommend that institutions of highereducation increase their use of the resources available in the museums of the State by establishing additional cooperative relationships for research and undergraduate instruction. Joint use of facilities and highly specialized staff in such areas as anthropology, history, and fine arts is urged, along with the development of more formally organized opportunities for students to earn college credit through individual study and proficiency examinations. (pp. 87-88)

(56) Have drafted a statewide plan for expanding and strengthening museum services; legislation implementing this plan and budgetary support for setting the plan in motion should be provided. (p. 87-88)

To Improve State Services to the Colleges, the Regents:

(57) Recommend that each private college and university develop by 1968 a "perpetual inventory" type of long-range plan, looking ahead at least five years for program and fiscal development. (pp. 89-90)

(58) Will direct the State Education Department to make a study in cooperation with the Board of Trustees, State University of New York; the Board of Higher Education of the City of New York; and the privately controlled colleges and universities to describe more precisely and completely the fiscal procedures followed in higher education, and to determine better per-student cost figures on which to base cost estimates and comparisons. (p. 89)

(59) Will establish in the State Education Department at an early date an Office of Science and Technology. (p. 90)

(60) Will establish a periodic survey of college-going aspirations and other related characteristics of high school seniors, using fully the Regents Scholarships Examination which already reaches annually most high school seniors in the State. (p. 91)

To Guide and Encourage the Development of New Programs and Institutions, the Regents:

(61) Will direct the Education Department to develop a plan in consultation with chief executive officers of colleges and universities representative of The University of the State of New York, to provide guidelines and more formal procedures for the establishment under either public or private auspices of new curriculums, new institutions of higher education, new college branches, or extension centers. These guidelines and procedures should guarantee the widespread discussion and review of proposed new developments by the academic community in New York State before formal action is taken by the Regents or the Department. (pp. 92-93)

(62) Recommend that the conditions of incorporation of a college, now requiring at least $500,000, be changed to $1,000,000; except that the former figure will remain for incorporation of new junior colleges. (p. 93)

(63) Recommend that the Legislature appropriate for fiscal 1965-66 and subsequent years the sum of $500,000 to be used by the Board of Regents to contract with colleges, public or private, for the initial development of programs in areas of critical State need, the contracts to be made on a matching basis and for a period not to exceed five years. (pp. 73-74, 93-94)

APPENDIX A

EXCERPTS FROM CHAPTER 388

LAWS OF NEW YORK, 1961

AN ACT to amend the education law, in relation to the regents plan for the development and expansion of facilities for higher education in New York state and establishing the city university of New York, and repealing section eight hundred fifty-four thereof

Became a law April 11, 1961, with the approval of the Governor. Passed, on message of necessity, pursuant to article III, section 14 of the Constitution, by a majority vote, three-fifths being present

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The education law is hereby amended by adding thereto a new section, to be section two hundred thirty-seven thereof, to read as follows:

§ 237. Regents plan for higher education including approved plans of state university and city university of New York. 1. The regents shall, once every four years, review the proposed plan and recommendations required to be submitted by the state university trustees pursuant to section three hundred fifty-four of this chapter and the proposed plan and recommendations of the board of higher education in the city of New York required to be submitted pursuant to section sixty-two hundred two of this chapter, and upon approval of such plans by the regents they shall be incorporated into a regents plan or general revision thereof for the expansion and development of higher education in the state. Such regents plan shall include the plan and recommendations proposed by the state university trustees and the plan and recommendations proposed by the board of higher education in the city of New York and may include plans with respect to other matters not comprehended within the plan of the state and city universities, including but not limited to improving institutional management and resources, instruction and guidance programs, financial assistance to students and extension of educational opportunities through library resources and television. In the development of such plans due recognition shall be given to that historical development of higher education in the state which has been accomplished through the establishment and encouragement of private institutions. In determining the need for additional educational facilities in a particular area, the plans and facilities of existing public and private institutions shall be fully evaluated and considered.

2. During the calendar year nineteen hundred sixty-four and each fourth year thereafter the regents shall evaluate all available information with respect to the plans and facilities of private institutions and shall review and act upon the proposed plan and

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EXPLANATION — Matter in *italics* is new; matter in brackets [ ] is old law to be omitted.

recommendations of the state university trustees and upon the proposed plan and recommendations of the board of higher education in the city of New York and incorporate such information, recommendations and each of the component plans so acted upon into a tentative regents plan or general revision thereof for the expansion and development of higher education in the state. Copies of such tentative regents plan or general revision thereof, as the case may be, shall be made available to the trustees of the state university, the board of higher education in the city of New York and the governing boards of all other institutions of higher education admitted to the university of the state of New York. Thereafter, after giving due notice, the regents shall conduct one or more hearings on such tentative regents plan or general revision thereof.

3. The regents shall transmit their plan or general revision thereof for the expansion and development of higher education in the state to the governor and the legislature on or before the first day of December, nineteen hundred sixty-four and each fourth year thereafter, and such plan or general revision thereof shall become effective upon its approval by the governor.

4. Any modification recommended by the state university trustees or by the board of higher education in the city of New York to their respective plans, theretofore formulated and approved pursuant to section three hundred fifty-four or section sixty-two hundred two of this chapter shall be reviewed by the regents who may hold one or more hearings thereon after giving due notice thereof. As approved by the regents, such modification shall be made a part of the respective plans of the state university and of the city university and shall, together with any modifications the regents may make to that portion of their plan for the expansion and development of higher education in the state not comprehended in the plans of the state and city universities, be transmitted to the governor and the legislature, all of which shall then become effective upon approval by the governor as modifications of the regents plan. By the first day of November in each of the three years following the promulgation of the regents plan or general revision thereof, the regents shall summarize and report to the governor and the legislature any modifications made pursuant to this subdivision and shall include in such report a statement on the progress made in implementing the regents plan and their general recommendations with respect to higher education.

§ 2. Subdivision one of section three hundred fifty-two of such law, as last amended by chapter seven hundred thirty-four of the laws of nineteen hundred fifty-one, is hereby amended to read as follows:

1. There is hereby created in the state education department *and* within the [higher educational system of the state] *university of the state of New York* as established under the board of regents a corporation to be known as the state university of New York which shall be responsible for the planning, supervision and administration of facilities *and programs in accordance with the plan pro-*

posed by the state university trustees as approved by the regents pursuant to section two hundred thirty-seven of this chapter, and provisions for higher education supported in whole or in part with state moneys in accordance with the provisions of section three hundred fifty-eight hereof, and to perform such other duties as may be entrusted to it by law. Such corporation shall have the care, custody, control and management of the lands, grounds, buildings, facilities and equipment used for the purposes of the state-operated institutions of the state university, and it shall have power to protect, preserve and improve the same.

§ 3. Section three hundred fifty-four of such law, subdivision two having been amended by chapter two hundred ninety-nine of the laws of nineteen hundred fifty-five, and subdivision three having been amended by chapter six hundred ninety-eight of the laws of nineteen hundred forty-eight, is hereby repealed.

§ 4. Such law is hereby amended by adding thereto a new section, to be section three hundred fifty-four, to read as follows:

§ *354. Powers and duties of state university trustees planning functions. 1. The state university trustees shall, once every four years, formulate a long-range state university plan or general revision thereof and make recommendations to the board of regents and the governor for the organization, development, coordination and expansion of the state university and for the establishment of community colleges in areas suitable for and in need of such institutions, which plan and recommendations shall include the following:*

a. Plans for new curricula.

b. Plans for new facilities.

c. Plans for change in policies with respect to student admissions.

d. Potential student enrollments.

e. Comments upon its relationship to other colleges and universities, public and private, within the state.
Prior to transmitting their long-range state university plan or general revision thereof to the board of regents and the governor the state university trustees may, after giving due notice, conduct one or more hearings on such plan.

2. During the calendar year nineteen hundred sixty-four and each fourth year thereafter the state university trustees shall transmit their proposed plan or general revision thereof to the board of regents and the governor on or before the twentieth day of September in each such year. Such plan shall be reviewed by the board of regents and shall be subject to approval by such board. As approved by the board of regents and incorporated into the regents plan or general revision thereof for the expansion and development of higher education in the state and, upon approval thereafter by the governor, such plan shall guide and determine the development and expansion of the state university and the establishment of community colleges until such plan is modified or revised in the manner provided herein.

3. By the twentieth day of September in each of the three years following the approval of the state university plan or general revision thereof pursuant to section two hundred thirty-seven of this chapter, the state university trustees shall report in writing to the board of regents and to the governor on the progress made in carrying out their responsibilities under such plan and their general recommendations with respect to public higher education, including recommendations as to modifications of such plan which the trustees deem essential to meet the then current demands upon public higher education. The state university trustees may also at any other time propose modifications which they then deem essential or desirable with respect to such plan. They may, after giving due notice, conduct one or more hearings on such modifications and shall transmit their recommendations therefor to the board of regents and the governor. Such modifications shall be subject to approval by the regents and thereafter by the governor in the same manner as such plan or general revisions thereof.

§ 5. The opening paragraph of subdivision one of section three hundred fifty-five of such law, as amended by chapter five hundred twenty-five of the laws of nineteen hundred fifty-three, is hereby amended to read as follows:

Subject to the [general supervision and approval of the board of regents] *provisions of the plan or general revision thereof proposed by the state university trustees as approved by the regents pursuant to section two hundred thirty-seven of this chapter*, the state university trustees shall be responsible for:

§ 6. The opening paragraph of subdivision two of section three hundred fifty-five of such law, as amended by chapter five hundred twenty-five of the laws of nineteen hundred fifty-three, is hereby amended to read as follows:

The state university trustees are further authorized and empowered, subject to the [general supervision and approval of the board of regents] *provisions of the plan or general revisions thereof proposed by the state university trustees as approved by the regents pursuant to section two hundred thirty-seven of this chapter:*

§ 7. Section sixty-two hundred two of such law, as last amended by a chapter of the laws of nineteen hundred sixty-one, entitled "An act to amend the education law, in relation to the number of regents college scholarships and scholarships for education in engineering and science, to establish the New York state scholar incentive program, to remove existing restrictions on the authority of the state university trustees, the contract colleges and the board of higher education in the city of New York to establish tuition policy and to repeal subdivision eight of section six hundred twelve-a thereof and making an appropriation therefor," is hereby amended to read as follows:

§ 6202. Powers and duties. *1.* Such board of higher education shall be a separate and distinct body corporate, shall have the duties and powers of trustees of colleges as set forth in this chapter, unless otherwise specifically provided in this article, and the institutions and educational units which such board shall conduct shall be part of the common school system and shall have the powers and privileges of colleges and shall be subject to the visitation of the regents of the university. The control of the educational work of such institutions shall rest solely in the board of higher education which shall administer all educational units controlled by it, as and under the general name and title of the [college of the] city *university* of New York; but each unit of such [college] *university* shall be given an appropriate and distinctive designation, and any existing unit, constituting a college for women, shall retain its present, distinctive name.

2. a. The board of higher education in the city of New York shall, once every four years, formulate a long range city university plan or general revision thereof and make recommendations to the board of regents, and to the state university trustees for information and comment, for the organization, development, coordination and expansion of the city university of New York which plan and recommendations shall include the following:

(1) Plans for new curricula.

(2) Plans for new facilities.

(3) Plans for change in policies with respect to student admissions.

(4) Potential student enrollments.

(5) Comments upon its relationship to other colleges and universities, public and private, within the state:
Prior to transmitting their long-range plan or general revisions thereof to the board of regents and the state university trustees, the board of higher education may, after giving due notice, conduct one or more hearings on such plan.

b. During the calendar year nineteen hundred sixty-four and each fourth year thereafter the board of higher education shall transmit their proposed plan or general revisions thereof to the board of regents, and the state university trustees for information and comment on or before the first day of July in each such year. Such plan shall be reviewed by the board of regents and shall be subject to approval by such board. Prior to approval by the board of regents such plan shall also be subject to such comment as the state university trustees may wish to make pursuant to section three hundred fifty-four of this chapter on the plan or general revisions thereof required to be submitted by the state university trustees. As approved by the board of regents and incorporated into the regents plan or general revision thereof for the expansion and development of higher education in the state and, upon approval thereafter by the governor, such plan shall guide and determine the development and expansion of the city university of New York.

c. By the first day of September in each of the three years following the approval of the city university plan or general *revision thereof pursuant to section two hundred thirty-seven of this chapter, the board of higher education shall report in writing to the board of regents, a copy of which report shall be furnished to the state university trustees for information and comment, on the progress made in carrying out its responsibilities under such plan and its general recommendations with respect to the city university or its component colleges or other institutions in the city of New York including recommendations as to modifications of such plan which the board of higher education deems essential to meet the then current demands upon public higher education in the city of New York. The board of higher education may also at any other time propose modifications which it deems essential or desirable with respect to such plan. Such board may, after giving due notice, conduct one or more hearings on such modifications and shall transmit its recommendations therefor to the board of regents and the state university trustees for information and comment. Such modifications shall be subject to approval by the regents and thereafter by the governor in the same manner as such plan or general revisions thereof.*

APPENDIX B

SELECTED LIST OF REPORTS AND STUDIES RELATED TO PLANNING FOR HIGHER EDUCATION IN NEW YORK STATE

I. Related State and National Reports

Change/Challenge/Response: A Development Program for New York State. Albany, Office for Regional Development, 1964.

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Education for the Health Professions: A Comprehensive Plan for Comprehensive Care to Meet New York's Needs in an Age of Change. A report to the Governor and the Board of Regents from The New York State Committee on Medical Education, Malcolm Muir, Chairman. Albany, The New York State Education Department, 1963.

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Final Report to the W. K. Kellogg Foundation. The State Education Department Associate Degree Nursing Project, Robert E. Kinsinger, Director. Albany, The State Education Department, 1964.

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Higher Education for American Democracy. A report of the President's Commission on Higher Education. Volume I, Establishing the Goals. New York, Harper & Bros., 1948.

Increasing College Capacity by Calendar Revision. A report to State University of New York by Nelson Associates. Albany, State University of New York Institutional Research Study, 1961.

Jobs 1960-1970, The Changing Pattern: Manpower and Technological Change in New York State. Albany, The New York State Department of Labor, 1960.

Long-Range Demand for Scientific and Technical Personnel. Prepared for the National Science Foundation by the U. S. Department of Labor Bureau of Labor Statistics. NSF 61-65. Washington, Government Printing Office, 1961.

Manpower Report of the President, and A Report on Manpower Requirements, Resources, Utilization, and Training. Washington, Government Printing Office, 1964.

Maul, Ray C., Teacher Supply and Demand in Universities, Colleges, and Junior Colleges, 1961-62 and 1962-63. Washington, National Education Association Research Report 1963-R3.

Meeting the Increasing Demand for Higher Education in New York State. A report to the Governor and the Board of Regents. Committee on Higher Education (Marion B. Folsom, John W. Gardner, Henry T. Heald, Chairman), and Director of Studies Sidney G. Tickton. Albany, The State Education Department, 1960.

Meeting Manpower Needs in Science and Technology, Report No. 1: Graduate Training in Engineering, Mathematics, and Physical Sciences. A report of the President's Science Advisory Committee. Washington, Government Printing Office, 1962.

New York Women and Their Changing World. A report and recommendations from the Governor's Committee on the Education and Employment of Women, Mrs. Oswald B. Lord, Chairman. Albany, The State of New York, 1964.

Projecting New York State Job Patterns. A technical supplement to Jobs, 1960-1970. New York, New York State Department of Labor Division of Research and Statistics, 1961.

Prospects for Library Cooperation in New York City: Planning for More Effective Utilization of Reference and Research Resources. New York, Nelson Associates, Inc., 1963.

Reinert, The Very Rev. Paul C., S.J., President, St. Louis University, and Keppel, The Hon. Francis, U. S. Commissioner of Education, Catholic Education and National Needs. Reprinted from address delivered at the 61st annual convention of the College and University Department of the National Catholic Education Association, 1964. St. Louis, Office of Public Information, St. Louis University, 1964.

Report of the Commissioner's Committee on Museum Resources. Albany, The State Education Department, New York State Museum and Science Service, 1962.

Report of the Commissioner's Committee on Reference and Research Library Resources. The New York State Library, 1961.

Scientists, Engineers, and Technicians in the 1960's. Prepared for the National Science Foundation by the U. S. Department of Labor Bureau of Labor Statistics. NSF 63-34. Washington, Government Printing Office, 1963.

Stambler, Howard V., *Scientists and Engineers, 1960-70.* Reprinted from November, 1963 *Monthly Labor Review.* Washington, U. S. Department of Labor Bureau of Labor Statistics, Reprint No. 2428.

Starlin, Glenn, *Television and Higher Education: A Plan for Statewide Development in New York.* Albany, The State Education Department, 1962.

Strengthening and Coordinating Reference and Research Library Resources in New York State: A Study of Statewide Aspects of the Proposed Legislation Based on the Report of the Commissioner's Committee on Reference and Research Library Resources. New York, Nelson Associates, Inc., 1963.

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II. Special Unpublished Studies and Surveys Completed for the Regents 1964 Plan

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"Distribution of Enrollment in Colleges and Universities in New York State, 1959-1970." Office of Planning in Higher Education, State Education Department, 1964.

"Enrollment in New York State Institutions in 1960-1978." Office of Planning in Higher Education, State Education Department, 1965.

"High School Graduates and College-Age Population in New York State, Regions, and Counties (Projected to 1980)," Division of Research in Higher Education and the Bureau of Statistical Services, State Education Department.

McHugh, Robert, "Supply and Demand for Faculty Personnel in Colleges and Universities in New York State, 1963-64, Projected to 1970-71." Office of Planning in Higher Education, State Education Department.

"Projected Expansion of Existing Graduate and Professional Programs, 1963-70, New York State Colleges and Universities." Office of Planning in Higher Education, State Education Department.

"Projection of College Enrollments in New York State to 1980." Bureau of Statistical Services, State Education Department.

"Projection of College Potential Based on President's Commission Assumptions, 1959-60 through 1979-80." Office of Planning in Higher Education, State Education Department.

"Projection of College Potential Based on State Education Department Formula of Experience with Regents Scholarship Examinations, 1963-64 through 1980-81." Office of Planning in Higher Education, State Education Department.

"Residence and Migration of Students Attending Colleges and Universities in New York State, Fall, 1963." Office of Planning in Higher Education and Bureau of Statistical Services, State Education Department.

APPENDIX C

MEMBER HIGHER INSTITUTIONS OF THE UNIVERSITY OF THE STATE OF NEW YORK AND THEIR INSTITUTIONAL BRANCHES OPERATING IN NEW YORK STATE, 1964

	Location	
Institutions Classified as Four-Year	County	Planning Region
Adelphi University		
Adelphi University	Nassau	Long Island
Suffolk College	Suffolk	Long Island
Alfred University	Allegany	Elmira
Bank Street College of Education	New York	N. Y. Metropolitan
Baptist Bible Seminary	Broome	Binghamton
Bard College	Dutchess	Mid-Hudson
Biblical Seminary in New York	New York	New York City
Brentwood College	Suffolk	Long Island
Brooklyn Law School	Kings	N. Y. Metropolitan
Buffalo Bible Institute	Erie	Buffalo
Canisius College	Erie	Buffalo
Cathedral College of the Immaculate Conception		
Cathedral College of the Immaculate Conception	Kings	N. Y. Metropolitan
Lloyd Harbor, Huntington, L. I., Campus	Suffolk	Long Island
City University of New York		
Brooklyn College	Kings	N. Y. Metropolitan
City College	New York	N. Y. Metropolitan
Graduate Studies Division	New York	N. Y. Metropolitan
Hunter College	New York	N. Y. Metropolitan
Queens College	Queens	N. Y. Metropolitan
Clarkson, Thomas S. Memorial Col. of Technology	St. Lawrence	Northern
Colgate Rochester Divinity School	Monroe	Rochester
Colgate University	Madison	Syracuse
College of Insurance, The	New York	N. Y. Metropolitan
College of Mt. St. Vincent	Bronx	N. Y. Metropolitan
College of New Rochelle	Westchester	Rockland-Westchester
College of St. Rose		
College of St. Rose	Albany	Capital District
Town of Colonie Branch	Albany	Capital District
Colleges of the Seneca		
Hobart College	Ontario	Rochester
William Smith College	Ontario	Rochester
Columbia University		
Columbia University	New York	N. Y. Metropolitan
Barnard College*	New York	N. Y. Metropolitan
College of Pharmacy*	New York	N. Y. Metropolitan
Teachers College	New York	N. Y. Metropolitan
Cooper Union for the Advancement of Science & Art	New York	N. Y. Metropolitan
Cornell University		
Cornell University	Tompkins	Elmira
Cornell Medical College	New York	N. Y. Metropolitan
Divine Word Seminary	Livingston	Rochester
Dominican College of Blauvelt	Rockland	Rockland-Westchester
D'Youville College	Erie	Buffalo

Institutions Classified as Four-Year	County	Planning Region
Elmira College	Chemung	Elmira
Finch College	New York	New York Metropolitan
Fordham University	Bronx	New York Metropolitan
General Theological Seminary of the Protestant Episcopal Church	New York	New York Metropolitan
George Mercer, Jr. Memorial School of Theology	Nassau	Long Island
Good Counsel College	Westchester	Rockland-Westchester
Hamilton College	Oneida	Mohawk Valley
Hartwick College	Otsego	Binghamton
Hebrew Union College-Jewish Institute of Religion	New York	New York Metropolitan
Hofstra University	Nassau	Long Island
Holy Trinity Orthodox Seminary	Herkimer	Mohawk Valley
Houghton College	Allegany	Elmira
Immaculate Conception Seminary at Troy	Rensselaer	Capital District
Institute of Public Administration	New York	New York Metropolitan
Iona College	Westchester	Rockland-Westchester
Ithaca College	Tompkins	Elmira
Jewish Theological Seminary of America	New York	New York Metropolitan
Juilliard School of Music	Bronx	New York Metropolitan
Keuka College	Yates	Rochester
King's College (The)	Westchester	Rockland-Westchester
Ladycliff College	Orange	Mid-Hudson
LeMoyne College	Onondaga	Syracuse
Long Island University		
Long Island University-University Center	Kings	New York Metropolitan
Long Island University-Brooklyn College of Pharmacy	Kings	New York Metropolitan
Long Island University-C.W. Post College	Nassau	Long Island
Long Island University-Southampton College	Suffolk	Long Island
M. J. Lewi College of Podiatry	New York	New York Metropolitan
Manhattan College	Bronx	New York Metropolitan
Manhattan School of Music	New York	New York Metropolitan
Manhattanville College of the Sacred Heart		
Manhattanville College of the Sacred Heart	Westchester	Rockland-Westchester
Albany Branch	Albany	Capital District
Mannes College of Music	New York	New York Metropolitan
Marist College	Dutchess	Mid-Hudson
Maryknoll Seminary	Westchester	Rockland-Westchester
Marymount College	Westchester	Rockland-Westchester
Marymount Manhattan College	New York	New York Metropolitan
Mary Rogers College	Westchester	Rockland-Westchester
Mercy College	Westchester	Rockland-Westchester
Mills College of Education	New York	New York Metropolitan
Molloy Catholic College for Women	Nassau	Long Island
Mount St. Alphonsus Seminary of Esopus, N. Y.	Ulster	Mid-Hudson
Mount St. Joseph College	Erie	Buffalo
Mount Saint Mary College	Orange	Mid-Hudson

Institutions Classified as Four-Year	County	Planning Region
Nazareth College	Monroe	Rochester
New York School of Social Research	New York	New York Metropolitan
New York College of Music	New York	New York Metropolitan
New York Institute of Technology		
New York Institute of Technology	New York	New York Metropolitan
New York Institute of Technology Westbury Branch	Nassau	Long Island
New York Law School	New York	New York Metropolitan
New York Medical College	New York	New York Metropolitan
New York University	New York	New York Metropolitan
Niagara University		
Niagara University	Niagara	Buffalo
Our Lady of Angels Seminary	Albany	Capital District
Notre Dame College of Staten Island	Richmond	New York Metropolitan
Nyack Missionary College	Rockland	Rockland-Westchester
Pace College		
Pace College	New York	New York Metropolitan
Pleasantville Institutional Branch	Westchester	Rockland-Westchester
(The) Passionist Monastic Seminary	Queens	New York Metropolitan
Polytechnic Institute of Brooklyn		
Polytechnic Institute of Brooklyn	Kings	New York Metropolitan
Farmingdale Long Island Branch	Nassau	Long Island
Pratt Institute	Kings	New York Metropolitan
Rensselaer Polytechnic Institute	Rensselaer	Capital District
Roberts Wesleyan College	Monroe	Rochester
Rochester Institute of Technology	Monroe	Rochester
Rochester, University of	Monroe	Rochester
The Rockefeller Institute	New York	New York Metropolitan
Rosary Hill College		
Rosary Hill College	Erie	Buffalo
Stella Niagara Branch	Niagara	Buffalo
Russell Sage College	Rensselaer	Capital District
St. Bernard's Seminary and College	Monroe	Rochester
St. Bernardine of Siena College	Albany	Capital District
St. Bonaventure University	Cattaraugus	Buffalo
St. Charles Seminary	Richmond	New York Metropolitan
St. Francis College	Kings	New York Metropolitan
St. John Fisher College	Monroe	Rochester
St. John's University	Queens	New York Metropolitan
St. John Vianney Seminary	Erie	Buffalo
St. Joseph's College for Women	Kings	New York Metropolitan
St. Joseph's Seminary and College	Westchester	Rockland-Westchester
(The) St. Lawrence University	St. Lawrence	Northern
St. Pius X Seminary	Putnam	Mid-Hudson
St. Thomas Aquinas College	Rockland	Rockland-Westchester
St. Vladimir's Orthodox Theological Seminary	Westchester	Rockland-Westchester
Sarah Lawrence College	Westchester	Rockland-Westchester
Skidmore College	Saratoga	Capital District

Institutions Classified as Four-Year	County	Planning Region
STATE UNIVERSITY OF NEW YORK		
State University of New York at Albany	Albany	Capital District
State Univ. of New York at Albany, New Paltz Branch	Ulster	Mid-Hudson
State University of New York at Buffalo	Erie	Buffalo
State University of New York at Stony Brook	Suffolk	Long Island
Downstate Medical Center	Kings	New York Metropolitan
Upstate Medical Center	Onondaga	Syracuse
Graduate School of Public Affairs	Albany	Capital District
College at Brockport	Monroe	Rochester
College at Buffalo	Erie	Buffalo
College at Cortland	Cortland	Syracuse
College at Fredonia	Chautauqua	Buffalo
College at Geneseo	Livingston	Rochester
College at New Paltz	Ulster	Mid-Hudson
College at Oneonta	Otsego	Binghamton
College at Oswego	Oswego	Syracuse
College at Plattsburgh	Clinton	Northern
College at Potsdam	St. Lawrence	Northern
Harpur College	Broome	Binghamton
College of Forestry at Syracuse University	Onondaga	Syracuse
Maritime College	Bronx	New York Metropolitan
College of Ceramics at Alfred University	Allegany	Elmira
College of Agriculture at Cornell University	Tompkins	Elmira
College of Home Economics at Cornell University	Tompkins	Elmira
School of Industrial and Labor Relations at Cornell University	Tompkins	Elmira
Veterinary College, Cornell University	Tompkins	Elmira
Syracuse University		
Syracuse University	Onondaga	Syracuse
Syracuse University-Utica College	Oneida	Mohawk Valley
Chautauqua Center of Syracuse University	Chautauqua	Buffalo
Poughkeepsie-Kingston College of Syracuse Univ.	Ulster	Mid-Hudson
Griffis Air Force Base Center of Syracuse Univ.	Oneida	Mohawk Valley
Endicott-Owego Center of Syracuse University	Broome	Binghamton
Union Theological Seminary		
Union Theological Seminary	New York	New York Metropolitan
Auburn Theological Seminary*	New York	New York Metropolitan
Union University		
Union University (Union College)	Schenectady	Capital District
Union University-Albany College of Pharmacy	Albany	Capital District
Union University-Albany Law School	Albany	Capital District
Union University-Albany Medical College	Albany	Capital District
Vassar College	Dutchess	Mid-Hudson
Wagner College	Richmond	New York Metropolitan
Webb Institute of Naval Architecture	Nassau	Long Island
Wells College	Cayuga	Syracuse
Yeshiva University	New York	New York Metropolitan

Institutions Classified as Two-Year	County	Planning Region
Academy of Aeronautics	Queens	New York Metropolitan
Adirondack Community College	Washington	Capital District
Auburn Community College	Cayuga	Syracuse
Bennett College	Dutchess	Mid-Hudson
Briarcliff College	Westchester	Rockland-Westchester
Broome Technical Community College	Broome	Binghamton
Buffalo Diocesan Preparatory Seminary	Erie	Buffalo
Catherine McAuley College	Monroe	Rochester
Cazenovia College	Madison	Syracuse
City University of New York		
Bronx Community College	Bronx	New York Metropolitan
Borough of Manhattan Community College	New York	New York Metropolitan
Kingsborough Community College	Kings	New York Metropolitan
New York City Community College of Applied Arts and Sciences	Kings	New York Metropolitan
Queensborough Community College	Queens	New York Metropolitan
Staten Island Community College	Richmond	New York Metropolitan
College of the Holy Names	Albany	Capital District
Concordia Collegiate Institute	Westchester	Rockland-Westchester
Corning Community College	Steuben	Elmira
Dutchess Community College	Dutchess	Mid-Hudson
Elizabeth Seton College	Westchester	Rockland-Westchester
Epiphany Apostolic College	Orange	Mid-Hudson
Erie County Technical Institute	Erie	Buffalo
Eymard Preparatory Seminary	Dutchess	Mid-Hudson
Fashion Institute of Technology	New York	New York Metropolitan
Fulton-Montgomery Community College	Fulton	Mohawk Valley
Hillside Hall	Rensselaer	Capital District
Hudson Valley Community College	Rensselaer	Capital District
Immaculata College	Erie	Buffalo
Jamestown Community College	Chautauqua	Buffalo
Jefferson Community College	Jefferson	Northern
La Salette Seminary	Albany	Capital District
Maria College of Albany	Albany	Capital District
Maria Regina College	Onondaga	Syracuse
Mater Christi Seminary	Albany	Capital District
Mater Dei College	St. Lawrence	Northern
Mohawk Valley Community College	Oneida	Mohawk Valley
Monroe Community College	Monroe	Rochester
Nassau Community College	Nassau	Long Island
Niagara County Community College	Niagara	Buffalo
Onondaga Community College	Onondaga	Syracuse
Orange County Community College	Orange	Mid-Hudson
Our Lady of Hope Mission Seminary	Orange	Mid-Hudson

Institutions Classified as Two-Year	County	Planning Region
Packer Collegiate Institute	Kings	N. Y. Metropolitan
Paul Smith's College of Arts and Sciences	Franklin	Northern
Presentation Jr. College of the Sacred Heart	Orange	Mid-Hudson
Queen of the Apostles College	Orange	Mid-Hudson
Rockland Community College	Rockland	Rockland-Westchester
Russell Sage College		
Albany Junior College	Albany	Capital District
Saint Clare College	Erie	Buffalo
St. Joseph Seraphic Seminary	Sullivan	Mid-Hudson
St. Pius X Preparatory Seminary of the Diocese of Rockville Centre	Nassau	Long Island
Sancta Maria Junior College	Erie	Buffalo
State University of New York		
Agricultural and Technical College at Alfred	Allegany	Elmira
Agricultural and Technical College at Canton	St. Lawrence	Northern
Agricultural and Technical College at Cobleskill	Schoharie	Capital District
Agricultural and Technical College at Delhi	Delaware	Binghamton
Agricultural and Technical College at Farmingdale	Nassau	Long Island
Agricultural and Technical College at Morrisville	Madison	Syracuse
Suffolk County Community College	Suffolk	Long Island
Sullivan County Community College	Sullivan	Mid-Hudson
Ulster County Community College	Ulster	Mid-Hudson
Villa Maria College of Buffalo	Erie	Buffalo
Voorhees Technical Institute	New York	N. Y. Metropolitan
Wadhams Hall	St. Lawrence	Northern
Westchester Community College	Westchester	Rockland-Westchester
William H. Miner Agricultural Research Institute	Clinton	Northern

*Institutions which have a corporate board operating within a larger corporation

APPENDIX D

REGIONAL AND COUNTY LISTING OF COLLEGES AND UNIVERSITIES

BINGHAMTON

Broome

Baptist Bible Seminary	Private, 4-year
Broome Technical Community College	Community College
Endicott-Owego Center of Syracuse University	Private, 4-year
Harpur College (SUNY)	Public, 4-year

Delaware

Agricultural and Technical Institute at Delhi (SUNY)	Public, 2-year (State)

Otsego

Hartwick College	Private, 4-year
College at Oneonta (SUNY)	Public, 4-year

BUFFALO

Cattaraugus

St. Bonaventure University	Private, 4-year

Chautauqua

Chautauqua Center of Syracuse University	Private, 4-year
College at Fredonia (SUNY)	Public, 4-year
Jamestown Community College	Community College

Erie

Buffalo Bible Institute	Private, 4-year
College at Buffalo (SUNY)	Public, 4-year
Buffalo Diocesan Preparatory Seminary	Private, 2-year
University at Buffalo (SUNY)	Public, 4-year
Canisius College	Private, 4-year
D'Youville College	Private, 4-year
Erie County Technical Institute	Community College
Immaculata College	Private, 2-year
Mount St. Joseph College	Private, 4-year
Rosary Hill College	Private, 4-year
Saint Clare College	Private, 2-year
St. John Vianney Seminary	Private, 4-year
Sancta Maris Junior College	Private, 2-year
Villa Maria College of Buffalo	Private, 2-year

Niagara

Niagara County Community College	Community College
Niagara University	Private, 4-year
Stella Niagara Branch (Rosary Hill College)	Private, 2-year

CAPITAL DISTRICT

Albany	Albany College of Pharmacy (Union University)	Private, 4-year
	Albany Law School (Union University)	Private, 4-year
	Albany Medical College (Union University)	Private, 4-year
	College of the Holy Names	Private, 2-year
	College of Saint Rose	Private, 4-year
	College of Saint Rose, Town of Colonie Branch	Private, 2-year
	Graduate School of Public Affairs (SUNY)	Public, 4-year
	LaSalette Seminary	Private, 2-year
	Manhattanville College of the Sacred Heart, Albany Branch	Private, 4-year
	Maria College of Albany	Private, 2-year
	Mater Christi Seminary	Private, 2-year
	Our Lady of Angels Seminary (Niagara University)	Private, 4-year
	St. Bernadine of Siena College	Private, 4-year
	State University of New York at Albany (SUNY)	Public, 4-year
	Russell Sage College, Albany Junior College Division	Private, 2-year
Rensselaer	Hillside Hall	Private, 2-year
	Hudson Valley Community College	Community College
	Immaculate Conception Seminary at Troy	Private, 4-year
	Rensselaer Polytechnic Institute	Private, 4-year
	Russell Sage College	Private, 4-year
Saratoga	Skidmore College	Private, 4-year
Schenectady	Union College of Union University	Private, 4-year
Schoharie	Agricultural and Technical Institute at Cobleskill (SUNY)	Public, 2-year (State)
Washington	Adirondack Community College	Community College

ELMIRA

Allegany	Agricultural and Technical Institute at Alfred (SUNY)	Public, 2-year (State)
	Alfred University	Private, 4-year
	College of Ceramics at Alfred University (SUNY)	Public, 4-year
	Houghton College	Private, 4-year
Chemung	Elmira College	Private, 4-year
Steuben	Corning Community College	Community College

Tompkins

College of Agriculture at Cornell University (SUNY)	Public, 4-year
College of Home Economics at Cornell University (SUNY)	Public, 4-year
Cornell University	Private, 4-year
Ithaca College	Private, 4-year
School of Industrial and Labor Relations at Cornell University (SUNY)	Public, 4-year
Veterinary College, Cornell University (SUNY)	Public, 4-year

LONG ISLAND

Nassau

Adelphi University	Private, 4-year
Agricultural and Technical Institute at Farmingdale (SUNY)	Public, 2-year (State)
George Mercer, Jr. Memorial School of Theology	Private, 4-year
Hofstra University	Private, 4-year
Nassau Community College	Community College
Molloy Catholic College for Women	Private, 4-year
New York Institute of Technology, Westbury Branch	Private, 4-year
Polytechnic Institute of Brooklyn, Farmingdale, Long Island Branch	Private, 4-year
C. W. Post College (Long Island University)	Private, 4-year
St. Pius X Preparatory Seminary of the Diocese of Rockville Centre	Private, 2-year
Webb Institute of Naval Architecture	Private, 4-year

Suffolk

Brentwood College	Private, 4-year
Lloyd Harbor, Huntington, L. I. Campus, Cathedral College of the Immaculate Conception	Private, 4-year
Southampton College (Long Island University)	Private, 4-year
State University of New York at Stony Brook	Public, 4-year
Suffolk College (Adelphi University)	Private, 4-year
Suffolk County Community College	Community College

MID-HUDSON

Dutchess

Bard College	Private, 4-year
Bennett College	Private, 2-year
Dutchess Community College	Community College
Eymard Preparatory Seminary	Private, 2-year
Marist College	Private, 4-year
Vassar College	Private, 4-year

Orange

Epiphany Apostolic College	Private, 2-year
Ladycliff College	Private, 4-year
Mount Saint Mary College	Private, 4-year
Orange County Community College	Community College
Our Lady of Hope Mission Seminary	Private, 2-year
Presentation Junior College of the Sacred Heart	Private, 2-year
Queen of the Apostles College	Private, 2-year

Putnam

St. Pius X Seminary	Private, 4-year

Sullivan

St. Joseph Seraphic Seminary	Private, 2-year
Sullivan County Community College	Community College

Ulster

College at New Paltz (SUNY)	Public, 4-year
Mount St. Alphonsus Seminary of Esopus, New York	Private, 4-year
Poughkeepsie-Kingston College of Syracuse University	Private, 4-year
State University of New York at Albany, New Paltz Branch	Public, 4-year
Ulster County Community College	Community College

MOHAWK VALLEY

Fulton

Fulton-Montgomery Community College	Community College

Herkimer

Holy Trinity Orthodox Seminary	Private, 4-year

Oneida

Griffiss Air Force Base Center of Syracuse University	Private, 4-year
Hamilton College	Private, 4-year
Mohawk Valley Community College	Community College
Utica College (Syracuse University)	Private, 4-year

NEW YORK METROPOLITAN

Bronx

Bronx Community College (CUNY)	Community College
College of Mount Saint Vincent	Private, 4-year
Fordham University	Private, 4-year
Juilliard School of Music	Private, 4-year
Manhattan College	Private, 4-year
Maritime College (SUNY)	Public, 4-year

Kings

Brooklyn College (CUNY)	Public, 4-year
Brooklyn College of Pharmacy (Long Island University)	Private, 4-year
Brooklyn Law School	Private, 4-year
Cathedral College of the Immaculate Conception	Private, 4-year
Downstate Medical Center (SUNY)	Public, 4-year
Kingsborough Community College (CUNY)	Community College
Long Island University - University Center	Private, 4-year
New York City Community College for Applied Arts and Sciences (CUNY)	Community College
Packer Collegiate Institute	Private, 2-year
Polytechnic Institute of Brooklyn	Private, 4-year
Pratt Institute	Private, 4-year
St. Francis College	Private, 4-year
St. Joseph's College for Women	Private, 4-year

New York

Auburn Theological Seminary (Union Theological Seminary)	Private, 4-year
Bank Street College of Education	Private, 4-year
Barnard College (Columbia University)	Private, 4-year
Biblical Seminary in New York	Private, 4-year
Borough of Manhattan Community College	Community College
City College (CUNY)	Public, 4-year
College of Insurance (The)	Private, 4-year
College of Pharmacy (Columbia University)	Private, 4-year
Columbia University	Private, 4-year
Cooper Union for the Advancement of Science and Art	Private, 4-year
Cornell Medical College (Cornell University)	Private, 4-year
Fashion Institute of Technology	Community College
Finch College	Private, 4-year
General Theological Seminary of the Protestant Episcopal Church	Private, 4-year
Graduate Studies Division (CUNY)	Public, 4-year
Hebrew Union College-Jewish Institute of Religion	Private, 4-year
Hunter College (CUNY)	Public, 4-year
Institute of Public Administration	Private, 4-year
Jewish Theological Seminary of America	Private, 4-year
M. J. Lewi College of Podiatry	Private, 4-year
Manhattan School of Music	Private, 4-year
Mannes College of Music	Private, 4-year
Marymount Manhattan College	Private, 4-year
Mills College of Education	Private, 4-year
New School of Social Research	Private, 4-year
New York College of Music	Private, 4-year
New York Institute of Technology	Private, 4-year
New York Law School	Private, 4-year
New York Medical College	Private, 4-year
New York University	Private, 4-year
Pace College	Private, 4-year
The Rockefeller Institute	Private, 4-year
Teachers College (Columbia University)	Private, 4-year
Union Theological Seminary	Private, 4-year
Voorhees Technical Institute	Private, 2-year
Yeshiva University	Private, 4-year

Queens

Academy of Aeronautics	Private, 2-year
(The) Passionist Monastic Seminary	Private, 4-year
St. John's University	Private, 4-year
Queens College (CUNY)	Public, 4-year
Queensborough Community College (CUNY)	Community College

Richmond

Notre Dame College of Staten Island	Private, 4-year
St. Charles Seminary	Private, 4-year
Staten Island Community College	Community College
Wagner College	Private, 4-year

NORTHERN

Clinton

College at Plattsburgh (SUNY)	Public, 4-year
William H. Miner Agricultural Research Institute	Private, 2-year

Franklin

Paul Smith's College of Arts and Sciences	Private, 2-year

Jefferson

Jefferson Community College	Community College

St. Lawrence

Agricultural and Technical Institute at Canton (SUNY)	Public, 2-year (State)
Clarkson, Thomas S. Memorial College of Technology	Private, 4-year
College at Potsdam (SUNY)	Public, 4-year
Mater Dei College	Private, 2-year
St. Lawrence University (The)	Private, 4-year
Wadhams Hall	Private, 2-year

ROCHESTER

Livingston

College at Geneseo (SUNY)	Public, 4-year
Divine Word Seminary	Private, 4-year

Monroe

Catherine McAuley College	Private, 2-year
Colgate Rochester Divinity School	Private, 4-year
College at Brockport (SUNY)	Public, 4-year
Monroe Community College	Community College
Nazareth College	Private, 4-year
Roberts Wesleyan College	Private, 4-year
Rochester Institute of Technology	Private, 4-year
St. Bernard's Seminary and College	Private, 4-year
St. John Fisher College	Private, 4-year
University of Rochester	Private, 4-year

Ontario

Hobart College	(Colleges of the Seneca)	Private, 4-year
William Smith College		Private, 4-year

Yates

Keuka College	Private, 4-year

ROCKLAND-WESTCHESTER

Rockland

Dominican College of Blauvelt	Private, 4-year
Nyack Missionary College	Private, 4-year
Rockland Community College	Community College
St. Thomas Aquinas College	Private, 4-year

Westchester

Briarcliff College	Private, 2-year
College of New Rochelle	Private, 4-year
Concordia Collegiate Institute	Private, 2-year
Elizabeth Seton College	Private, 2-year
Good Counsel College	Private, 4-year
Iona College	Private, 4-year
King's College (The)	Private, 4-year
Manhattanville College of the Sacred Heart	Private, 4-year
Maryknoll Seminary	Private, 4-year
Marymount College	Private, 4-year
Mary Rogers College	Private, 4-year
Mercy College	Private, 4-year
Pleasantville Institutional Branch (Pace College)	Private 2-year
St. Joseph's Seminary and College	Private, 4-year
St. Vladimir's Orthodox Theological Seminary	Private, 4-year
Sarah Lawrence College	Private, 4-year
Westchester Community College	Community College

SYRACUSE

Cayuga

Auburn Community College	Community College
Wells College	Private, 4-year

Cortland

College at Cortland (SUNY)	Public, 4-year

Madison

Agricultural and Technical Institute at Morrisville	Public, 2-year.(State)
Cazenovia College	Private, 2-year
Colgate University	Private, 4-year

Onondaga

College of Forestry at Syracuse University (SUNY)	Public, 4-year
LeMoyne College	Private, 4-year
Maria Regina College	Private, 2-year
Onondaga Community College	Community College
Syracuse University	Private, 4-year
Upstate Medical Center (SUNY)	Public, 4-year

Oswego

College at Oswego (SUNY)	Public, 4-year

APPENDIX E

SELECTED INFORMATION ON NEW YORK STATE COLLEGES AND UNIVERSITIES

Table 15 -- Higher Educational Institutions in New York State by Type of Control and Length of Programs, 1963-64*

Classification		Number
Private		
4-year or more		132
2-year		35
Total Private		167
Public		
4-year or more		
State University		25
City University		5
Total 4-year		30
2-year		
State University Agricultural & Technical Colleges		6
Community Colleges		
In New York City	7	
Other	21	
Total Community Colleges		28
Total 2-year		34
Total Public		64
State Total		231

*Includes main campuses and recognized institutional branches

Table 16-- Number and Highest Level of Offering of Higher Educational Institutions in Six States and in the United States, 1963-64.

Area	Total Colleges	Highest Level of Offering I	II	III	IV	V a/
United States	2,139	644	792	455	223	25
New York	187*	57	52	47	29	2
California	174	74	41	45	12	2
Pennsylvania	130	17	63	33	15	2
Illinois	114	32	38	30	12	2
Massachusetts	100	27	28	28	14	3
Texas	98	39	22	24	13	-

a/ I -- 2-year; II--Bachelor's degree and first professional degree only; III--Master's and/or second professional degree; IV--Doctor's or equivalent degree; V--other special purpose.

* Currently the Board of Regents recognizes 231 main campuses and institutional branches, some of which have been developed since these data were compiled. The discrepancy is also due in part to the difference in criteria used in classifications.

SOURCE: Office of Education, Education Directory, Part 3, Higher Education, 1963-64

TABLE 17

FULL-TIME DEGREE-CREDIT ENROLLMENT BY DEGREE LEVEL AND TYPE OF INSTITUTION
PRELIMINARY SURVEY - FALL 1964

Kind of Institution	Undergraduate			First Professional	Graduate	Non-matriculated	Grand Total
	Associate	4 & 5 Year Bachelor's	Total				
Private							
Four-year	5,103	128,224	133,327	9,666	16,764	3,099	162,856
Two-year	4,316		4,316			111	4,427
Total Private	9,419	128,224	137,643	9,666	16,764	3,210	167,283
Public							
SUNY							
Four-year	397	46,507	46,904	2,133	2,823	692	52,552
Ag. and Tech.	7,719		7,719			66	7,785
Community	31,229		31,229			735	31,964
Total SUNY	39,345	46,507	85,852	2,133	2,823	1,493	92,301
CUNY	948	38,773	39,721		579	185	40,485
Total Public	40,293	85,280	125,573	2,133	3,402	1,678	132,786
Total Four-year	6,448	213,504	219,952	11,799	20,166	3,976	255,893
Total Two-year	43,264		43,264			912	44,176
State Total	49,712	213,504	263,216	11,799	20,166	4,888	300,069

NOTE:--This table does not include enrollments reported as "nondegree-credit." In fall 1963 there were 899 full-time nondegree-credit students reported by the colleges and universities of New York State.

TABLE 18

PART-TIME DEGREE-CREDIT ENROLLMENT BY DEGREE LEVEL AND TYPE OF INSTITUTION PRELIMINARY SURVEY - FALL 1964

Kind of Institution	Undergraduate			First Professional	Graduate	Non-matriculated	Grand Total
	Associate	4 & 5 Year Bachelor's	Total				
Private							
Four-year	2,289	24,055	26,344	1,617	39,959	34,498	102,418
Two-year	350		350			434	784
Total Private	2,639	24,055	26,694	1,617	39,959	34,932	103,202
Public							
SUNY							
Four-year	8	6,016	6,024	5	4,896	4,295	15,220
Ag. and Tech.	149		149			2,458	2,607
Community	14,510		14,510			24,956	39,466
Total SUNY	14,667	6,016	20,683	5	4,896	31,709	57,293
CUNY	8,031	8,229	16,260		12,560	32,981	61,801
Total Public	22,698	14,245	36,943	5	17,456	64,690	119,094
Total Four-year	10,328	38,300	48,628	1,622	57,415	71,774	179,439
Total Two-year	15,009		15,009			27,848	42,857
State Total	25,337	38,300	63,637	1,622	57,415	99,622	222,296

NOTE:--This table does not include enrollments reported as "nondegree-credit." In fall 1963 there were 37,455 part-time nondegree-credit students reported by the colleges and universities of New York State.

TABLE 19

FULL- AND PART-TIME DEGREE-CREDIT ENROLLMENT BY DEGREE LEVEL AND TYPE OF INSTITUTION
PRELIMINARY SURVEY - FALL 1964

Kind of Institution	Undergraduate			First Professional	Graduate	Non-matriculated	Grand Total
	Associate	4 & 5 Year Bachelor's	Total				
Private							
Four-year	7,392	152,279	159,671	11,283	56,723	37,597	265,274
Two-year	4,666		4,666			545	5,211
Total Private	12,058	152,279	164,337	11,283	56,723	38,142	270,485
Public							
SUNY							
Four-year	405	52,523	52,928	2,138	7,719	4,987	67,772
Ag. and Tech.	7,868		7,868			2,524	10,392
Community	45,739		45,739			25,691	71,430
Total SUNY	54,012	52,523	106,535	2,138	7,719	33,202	149,594
CUNY	8,979	47,002	55,981		13,139	33,166	102,286
Total Public	62,991	99,525	162,516	2,138	20,858	66,368	251,880
Total Four-year	16,776	251,804	268,580	13,421	77,581	75,750	435,332
Total Two-year	58,273		58,273			28,760	87,033
State Total	75,049	251,804	326,853	13,421	77,581	104,510	522,365

NOTE:--This table does not include enrollments reported as "nondegree-credit." In fall 1963 there were 38,354 full- and part-time nondegree-credit students reported by the colleges and universities of New York State.

TABLE 20

COMPARISON OF DEGREE-CREDIT ENROLLMENTS FALL 1963 AND FALL 1964*

Kind of Institution	Enrollment						Percent Change 1963-1964		
	Full-time		Part-time		Total				
	1963	1964	1963	1964	1963	1964	Full-time	Part-time	Total
Private									
Four-year	151,921	162,856	97,778	102,418	249,699	265,274	7.2%	4.7%	6.2%
Two-year	3,851	4,427	755	784	4,606	5,211	15.0	3.8	13.1
Total Private	155,772	167,283	98,533	103,202	254,305	270,485	7.4	4.7	6.4
Public									
SUNY									
Four-year	46,128	52,552	13,379	15,220	59,507	67,772	13.9	13.8	13.9
Ag. and Tech.	6,518	7,785	2,119	2,607	8,637	10,392	19.4	23.0	20.3
Community	23,827	31,964	31,353	39,466	55,180	71,430	34.2	25.9	29.4
Total SUNY	76,473	92,301	46,851	57,293	123,324	149,594	20.7	22.3	21.3
CUNY	37,393	40,485	55,860	61,801	93,253	102,286	8.3	10.6	9.7
Total Public	113,866	132,786	102,711	119,094	216,577	251,880	16.6	16.0	16.3
Total Four-year	235,442	255,893	167,017	179,439	402,459	435,332	8.7	7.4	8.2
Total Two-year	34,196	44,176	34,227	42,857	68,423	87,033	29.2	25.2	27.2
State Total	269,638	300,069	201,244	222,296	470,882	522,365	11.3	10.5	10.9

* Preliminary data for Fall 1964.

NOTE:--This table does not include enrollments reported as "nondegree-credit." In fall 1963 there were 38,354 full- and part-time nondegree-credit students reported by the colleges and universities of New York State.

Table 21
Selected Comparative Data, Private and Public Institutions

Item	Private		Public					Total
	4 Year	2 Year	4 Year			2 Year		
			CUNY	SUNY		A & T	Comm. Colleges	
				Contract Colleges	All Other			
Value of Physical Plant, 1962-63	$ 1.3 bil.[a]	$56.6 mil.	$79.8 mil.	[a]	$353.0 mil.	$40.1 mil.	$64.3 mil.	$ 1.9 bil.
Educational and General Expenditures, 1961-62	$490.4 mil.[a]		$53.9 mil.	[a]	$57.6 mil.		$18.1 mil.	$620.0 mil.
Faculty, Fall 1963 Full Time	13,250	300	2,611	587	3,702	414	1,439	22,303
Part Time	11,388	224	2,348	0	289	17	197	14,463
Total	24,638	524	4,959	587	3,991	431	1,636	36,766
Enrollment, Fall 1963 Full Time	152,099	3,902	37,673	4,712	41,726	6,550	23,815	270,477
Part Time	118,281	807	66,898	73	14,958	4,119	34,507	239,643
Total	270,380	4,709	104,571	4,785	56,684	10,669	58,322	510,120

[a] Data for contract colleges included with data for 4 year private institutions.

APPENDIX F

New York State Board of Regents Policy Statement on the Comprehensive Community College

A comprehensive community college has a unique role to play in public higher education. The demands of society on postsecondary education are heavy and increasing both in the numbers to be served and the range of opportunities to be provided. The State of New York is fortunate to have 25 community colleges now in operation and 3 more authorized for development. The Board of Regents commends both the local sponsoring agencies and the Board of Trustees of State University of New York, under whose general supervision the community colleges are created and operate, for this record of accomplishment.

In the past, the Board of Regents has issued several statements stressing the important role of the 2-year colleges in the total structure of public education in the State. An essential step in the formulation of the Regents' statewide plan for higher education in 1964 is a re-emphasis and an amplification of the Board's views on the critical educational function to be performed by comprehensive community colleges. Therefore, the Board of Regents endorses the following propositions:

I - Comprehensive community colleges should be recognized and supported as the basic institutional approach to providing a broader public educational opportunity above the high school level in New York State.

II - These institutions should be open to all high school graduates or persons with equivalent educational background, operated at low cost to the students, and located within reasonable daily commuting distance of the students' places of residence.

III - The comprehensive community colleges should be expected to perform the following specific educational functions:

A. General Education. To provide post-secondary-school general background and experience for all students in conjunction with study in their major academic fields.

B. College or University Transfer Education. To provide the requisite courses for 2 years of collegiate study for students who are interested and competent to carry their studies to the bachelor's degree.

C. Occupational or Terminal Education. To provide programs of education and training beyond the high school, but below the professional level, for students seeking, for whatever reason, immediate entry into the productive labor force in business, industry, or government organizations in need of employees with higher level abilities; and for persons already employed but seeking to improve or learn new skills required in our changing economic and cultural environment.

D. Adult or Continuing Education. To provide programs of continuing education appropriate to and consistent with the level immediately above the high school in the educational system to assist adults of all ages to meet changing educational, cultural, and economic conditions and to implement changes in their personal objectives.

E. Guidance and Counseling. To provide for all students the necessary testing, guidance, and counseling to enable each one to know and accept his strengths and limitations and to choose the program most suited to him in the light of objective information and his personal situation at the time.

IV - Two-year and four-year colleges, in a planned, coordinated, and complete system of public higher education, provide essential and complementary, but distinctive, services in post-high-school education. Therefore, existing 2-year colleges should not be converted to 4-year baccalaureate college status as an approach to the expansion of college programs in any region in the State.

V - Serious consideration should be given by the Board of Trustees of State University of New York and the Board of Higher Education of The City University of New York to the establishment of institutions which begin at the usual junior year of collegiate study and offer 2-year or 3-year programs leading to the bachelor's and/or higher degrees. These should be placed in locations where long-range plans of these universities, as approved by the Board of Regents under its statewide obligation, conclude that additional public programs leading to the bachelor's and/or higher degrees are needed.

VI - Consideration should be given by the Board of Trustees of State University of New York and the Board of Higher Education of The City University of New York in their 1964 Master Plans to formulating an admissions policy that recognizes the different educational functions of comprehensive community colleges and of baccalaureate degree-granting institutions and to moving as rapidly as possible toward a program of "open door" admissions of high school graduates to community colleges.

VII - Two-year and four-year colleges, public and private, should devote greater attention to the cooperative development of transfer arrangements to the end that students who complete community college transfer programs may be assured of ample opportunity to complete their educational objectives.

APPENDIX G

RESIDENCE AND MIGRATION OF COLLEGE STUDENTS IN NEW YORK STATE, FALL 1963

Table 22

NET MIGRATION IN AND OUT OF NEW YORK STATE

SELECTED CATEGORIES

FALL 1963

Category	Number of "Out of State" Residents Attending College in New York State (1)	Number of New York State Residents Attending College Outside New York State (2)	Net Migration In and Out of New York State (1)-(2)
Grand Total, All Students*	55,953	92,185	- 36,232
Undergraduate, Total*	36,961	76,371	- 39,410
First Professional	4,089	5,400	- 1,311
Graduate	14,903	10,414	+ 4,489

* Excludes part-time undergraduate students in the State University of New York

Table 23

INTER- AND INTRA-STATE MIGRATION TO NEW YORK STATE COLLEGES AND UNIVERSITIES
FULL-TIME UNDERGRADUATE STUDENTS
FALL 1963

Type of Institution	Number of Students in New York State Schools	Percent of Students Who are Residents of				Number of New York State Residents in New York State Schools	Percent of New York Residents Residing in		
		Border States*	Other States	Foreign Including Territories	New York State		County Wherein the College is Located	Economic Area Wherein the College is Located	All Other Counties
4-year or more									
Private	128,241	15.9%	6.2%	2.1%	75.8%	97,244	50.1%	19.8%	30.1%
Public									
CUNY	36,899	+	+	0.2	99.8	36,838	95.4	4.5	0.1
SUNY									
Univ. Ctrs.	13,249	1.8	0.3	0.7	97.2	12,881	38.7	14.0	47.3
Med. Ctrs.	57	5.3	1.7	+	93.0	53	47.2	11.3	41.5
Univ. Cols.	23,926	0.6	0.1	0.5	98.8	23,640	22.0	14.9	63.1
Contract Cols.	3,438	8.2	4.3	3.0	84.5	2,905	5.7	5.4	88.9
Other	1,358	10.1	2.0	1.0	86.9	1,180	32.1	21.1	46.8
Total 4-year or more	207,168	10.2	3.9	1.5	84.4	174,741	54.2	15.2	30.6
2-year									
Private	3,776	25.8	12.3	2.1	59.8	2,256	38.8	24.4	36.8
Public									
Ag. and Tech.	6,492	3.5	0.4	1.2	94.9	6,159	23.8	26.6	49.6
N.Y.C. Comm. Cols.	6,696	4.2	0.9	1.7	93.2	6,243	90.8	7.6	1.6
Other Comm. Cols.	16,929	1.9	0.1	0.3	97.7	16,548	69.7	18.5	11.8
Total 2-year	33,893	5.3	1.7	0.9	92.1	31,206	62.7	18.3	19.0
Total Private	132,017	16.1	6.4	2.1	75.4	99,500	49.9	19.9	30.2
Total Public	109,044	1.5	0.3	0.6	97.6	106,447	60.7	11.8	27.5
State Total	241,061	9.5	3.6	1.4	85.5	205,947	55.5	15.7	28.8

* Includes Connecticut, Massachusetts, New Jersey, Ohio, Pennsylvania and Vermont.

+ Less than 0.1 percent.

Table 24

INTER- AND INTRA-STATE MIGRATION TO NEW YORK STATE COLLEGES AND UNIVERSITIES
FIRST-TIME FRESHMEN
FALL 1963

Type of Institution	Number of Students in New York State Schools	Percent of Students Who are Residents of				Number of New York State Residents in New York State Schools	Percent of New York Residents Residing in		
		Border States*	Other States	Foreign Including Territories	New York State		County Wherein the College is Located	Economic Area Wherein the College is Located	All Other Counties
4-year or more									
Private	39,914	15.4%	5.9%	1.6%	77.1%	30,750	54.4%	17.3%	28.3%
Public									
CUNY	11,031	0.3	+	+	99.7	10,994	97.1	2.9	+
SUNY									
Univ. Ctrs.	3,657	0.7	0.3	0.6	98.4	3,601	36.1	14.3	49.6
Med. Ctrs.									
Univ. Cols.	7,101	0.4	0.1	0.2	99.3	7,046	17.2	13.7	69.1
Contract Cols.	888	7.8	3.6	2.6	86.0	764	4.8	5.1	90.1
Other	400	13.5	1.8	0.5	84.2	337	29.7	21.7	48.6
Total 4-year or more	62,991	10.1	3.8	1.1	85.0	53,492	56.2	13.5	30.3
2-year									
Private	2,011	26.3	14.0	1.7	58.0	1,164	31.5	28.5	40.0
Public									
Ag. and Tech.	3,603	3.4	0.4	0.5	95.7	3,448	23.2	26.2	50.6
N.Y.C. Comm. Cols.	3,057	4.3	0.5	0.7	94.5	2,907	89.9	8.3	1.8
Other Comm. Cols.	8,147	1.7	0.1	0.2	98.0	7,988	70.5	18.6	10.9
Total 2-year	16,836	5.5	1.9	0.5	92.1	15,507	60.7	19.1	20.2
Total Private	41,925	15.9	6.3	1.6	76.2	31,914	53.6	17.7	28.7
Total Public	37,902	1.6	0.3	0.3	97.8	37,085	60.3	12.2	27.5
State Total	79,827	9.1	3.4	1.0	86.5	68,999	57.2	14.8	28.0

* Includes Connecticut, Massachusetts, New Jersey, Ohio, Pennsylvania and Vermont.

+ Less than 0.1 percent.

Table 25

NET MIGRATION BY ECONOMIC AREA WITHIN NEW YORK STATE

FULL-TIME UNDERGRADUATE STUDENTS

FALL 1963

Economic Area	In Migration Number of "Out of Area" Residents Attending College in "This Area" (1)	Out Migration Number of Residents of "This Area" Attending College "Out of Area" (2)	Net Migration (1) - (2)
Binghamton	4,734	2,931	+ 1,803
Buffalo	6,614	5,068	+ 1,546
Capital District	6,609	4,387	+ 2,222
Elmira	10,909	2,597	+ 8,312
Mid-Hudson	3,350	4,355	- 1,005
Mohawk Valley	1,069	4,924	- 3,855
New York Metropolitan			
New York City	14,332	13,333	+ 999
Nassau-Suffolk	2,802	18,802	-16,000
Rockland-Westchester	3,466	9,166	- 5,700
Northern	5,318	2,096	+ 3,222
Rochester	6,046	6,087	- 41
Syracuse	12,186	3,689	+ 8,497

Table 25

INTRA-STATE MIGRATION MATRIX BY ECONOMIC AREA
FULL-TIME UNDERGRADUATE STUDENTS
FALL 1963

Location of College Attended (Economic Area)	Bing-hamton	Buffalo	Capital District	Elmira	Mid-Hudson	Mohawk Valley	New York Metropolitan			Northern	Rochester	Syracuse	Total
							New York City	Nassau-Suffolk	Rockland-Westchester				
Binghamton	1,742	219	519	273	450	325	836	1,179	350	94	227	262	6,476
Buffalo	282	14,520	444	448	276	401	999	1,066	381	246	1,478	593	21,134
Capital District	426	410	5,663	225	1,002	823	822	1,092	643	327	457	382	12,272
Elmira	536	1,379	711	2,429	571	390	2,065	1,688	927	275	1,593	774	13,338
Mid-Hudson	65	74	205	25	3,415	73	1,239	906	612	25	68	58	6,765
Mohawk Valley	105	99	95	37	47	563	40	89	51	109	138	259	1,632
New York Metropolitan													
New York City	147	183	294	60	579	120	73,491	8,569	4,067	83	136	94	87,823
Nassau-Suffolk	15	27	50	13	92	29	2,318	9,088	199	19	25	15	11,890
Rockland-Westchester	40	71	129	30	115	49	2,409	459	3,161	31	60	73	6,627
Northern	249	424	788	178	334	530	322	950	392	2,181	586	565	7,499
Rochester	297	1,272	407	633	288	380	670	833	396	256	6,514	614	12,560
Syracuse	769	910	745	675	601	1,804	1,613	1,971	1,148	631	1,319	5,745	17,931
Total	4,673	19,588	10,050	5,026	7,770	5,487	86,824	27,890	12,327	4,277	12,601	9,434	205,947

APPENDIX H

SPECIAL STUDIES PROJECTED AS A BASIS FOR FUTURE PLANNING

(Tentative Listing, Feb. 1965)

1. Analysis of Fiscal Procedures and Per-student Costs in Institutions of Higher Learning in New York State

2. Role and Scope of Member Higher Educational Institutions of the University of the State of New York

3. Costs Incurred by Students Attending Special-purpose Schools in New York State

4. Costs Incurred by Students Enrolling in Particular Occupational Programs in New York State

5. A Feasibility Study for a High-capacity Computer Facility

6. The Place of City University of New York Within the Existing Education Law

7. Intra-state Residence and Migration of College Students, 1965

8. Survey of College-going Aspirations of High School Seniors and Patterns of Entrance into College

9. Retention, Withdrawal, and Follow-up of College Students in New York State Colleges and Universities

10. Inventory of Resources and Centers for Providing Doctoral and Post-doctoral Programs in Science, Engineering, Technology, and in Selected Fields of social Sciences and the Humanities

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